SHARP SERVICE MANUAL

S75D4WQ-272ZR

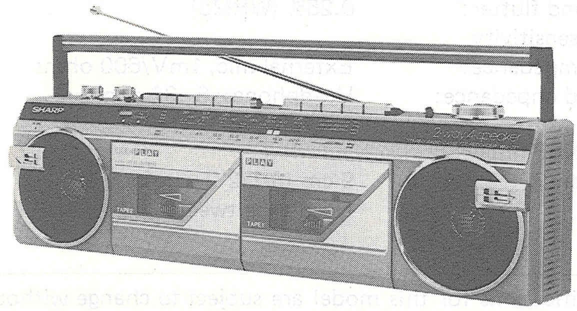

PHOTO: WQ-271Z(R)

WQ-271Z(R)
WQ-271Z(W)
WQ-271Z(BK)

In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

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SHARP CORPORATION

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

SPECIFICATIONS

GENERAL

Power source:	AC 110-127 V and 220–240 V, 50/60 Hz DC 9V (UM/SUM-2 or R14 type x 6)
Output power:	PMPO; 25 W (12.5 W + 12.5 W) (AC operation) MPO; 13 W (6.5 W + 6.5 W) (AC operation) RMS; 5.0 W (2.5 W + 2.5 W) (DC operation, 10% distortion)
Semiconductors:	6 ICs 18 Transistors 20 Diodes 2 LEDs
Dimensions:	Width; 440 mm (17-5/16") Height; 120 mm (4-3/4") Depth; 99 mm (3-15/16")
Weight:	2.4 kg (5.3 lbs.) without batteries

RADIO

Frequency range:	FM; 87.6 – 108 MHz SW_1; 2.3 – 7.3 MHz SW_2; 7.3 – 22 MHz MW; 526.5 – 1606.5 kHz

TAPE RECORDER

Tape:	Compact cassette tape
Frequency response:	80 Hz – 10,000 Hz
Signal/noise ratio:	50 dB
Wow and flutter:	0.25% (WRMS)
Input sensitivity and impedance:	External mic; 1mV/600 ohms
Loaded impedance:	Headphones; 8–32 ohms

SPEAKER

Speakers:	9 cm (3-1/2") woofer x 2 Horn type tweeter x 2

Specifications for this model are subject to change without prior notice.

VOLTAGE SELECTION

Before operating the unit on mains, check the preset voltage. If the voltage is different from your local voltage, adjust the voltage as follows: Slide the AC power supply socket cover by slightly loosing the screw to the visible indication of the side of your local voltage.

NAMES OF PARTS

1. Volume Control
2. Tone Control
3. Dubbing Speed Selector/ Built-in Microphone Switch
4. Function Selector/Power Switch
5. Continuous Play/FM Mode Switch
6. FM/SW Telescopic Rod Antenna
7. Fine Tuning Control
8. Band Selector Switch
9. Tuning Control
10. Built-in Microphone
11. Deck 2) Digital Tape Counter and Tape Counter Reset Button
12. Power Indicator
13. FM Stereo Indicator
14. Deck 2) Pause Button
15. Deck 2) Stop/Eject Button
16. Deck 2) Fast Forward Button
17. Deck 2) Rewind Button
18. Deck 2) Play Button
19. Deck 2) Record Button
20. Deck 1) Pause Button
21. Deck 1) Stop/Eject Button
22. Deck 1) Fast Forward Button
23. Deck 1) Rewind Button
24. Deck 1) Play Button
25. Beat Cancel Switch
26. Headphones Socket
27. External Microphone Socket
28. AC Power Supply Socket
29. Battery Compartment

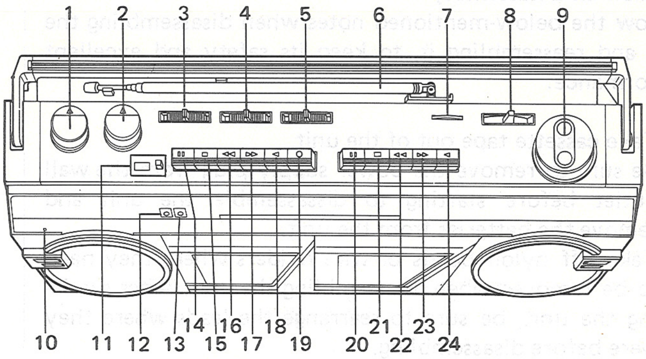


Figure 3–1

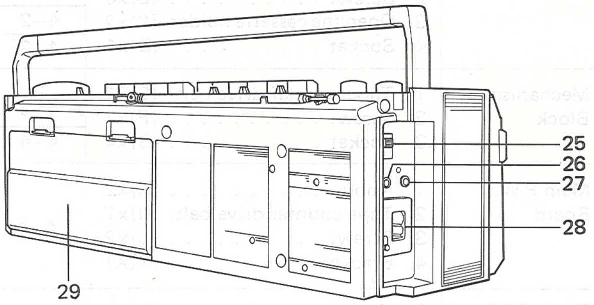


Figure 3–2

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep its safety and excellent performance:

1. Take cassette tape out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to dissassemble the unit and remove the batteries from the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

STEP	REMOVAL	PROCEDURE	FIGURE
1	Front Cabinet	1. Dial Pointer*¹ . . . . (A) 2. Screw. . . . . (B)x6 3. Open the cassette holder (C)x2 4. Socket . . . . (D)x1	4–1 4–2 4–3
2	Mechanism Block	1. Tape counter drive belt. (E)x1 2. Screw. . . . . (F)x3 3. Socket . . . . (G)x4	4–3 4–4
3	Main P.W. Board	1. Knob . . . . (H)x2 2. Tape counter drive belt. .(I)x1 3. Screw. . . . . (J)x2 4. Bracket. . . . .(K)	4–4
4	Tuner P.W. Board	1. Knob . . . . (L)x1 2. Screw. . . . . (M)x1 3. Bracket. . . . .(N) 4. Dial cord . . . .(O) 5. Screw. . . . . (P)x2 6. Hook . . . . (Q)x1	4–4
5	Power Supply P.W. Board	1. Tip . . . . (R)x2 2. Screw. . . . . (S)x4	4–4

*1. Rotate the tuning control knob to move the dial pointer to its extreme right (heighest frequency) position.

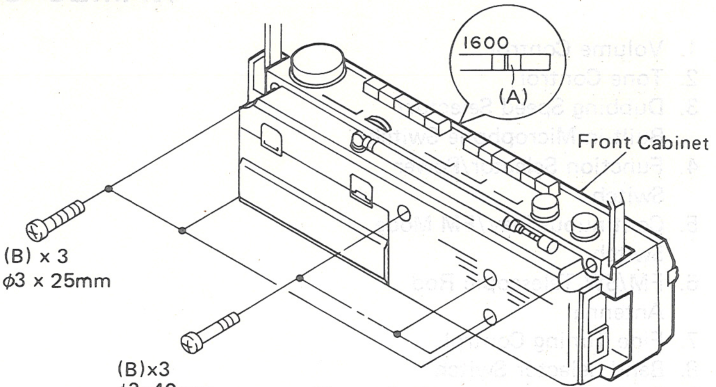

1600
(A)
Front Cabinet
(B) x 3
ϕ3 x 25mm
(B)x3
ϕ3x40mm

Figure 4–1

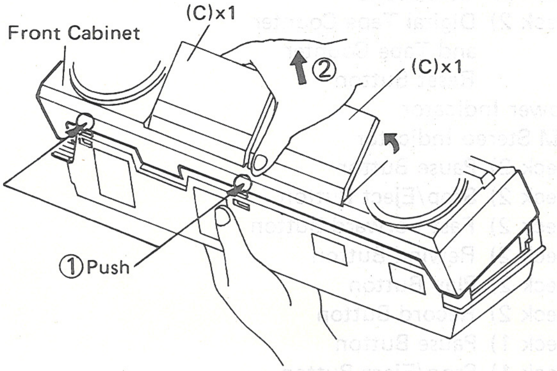

(C)x1
Front Cabinet
②
(C)x1
①Push

Figure 4–2

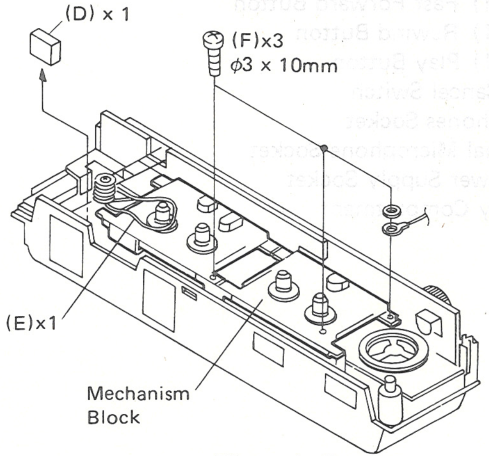

(D) x 1
(F)x3
ϕ3 x 10mm
(E)x1
Mechanism
Block

Figure 4–3

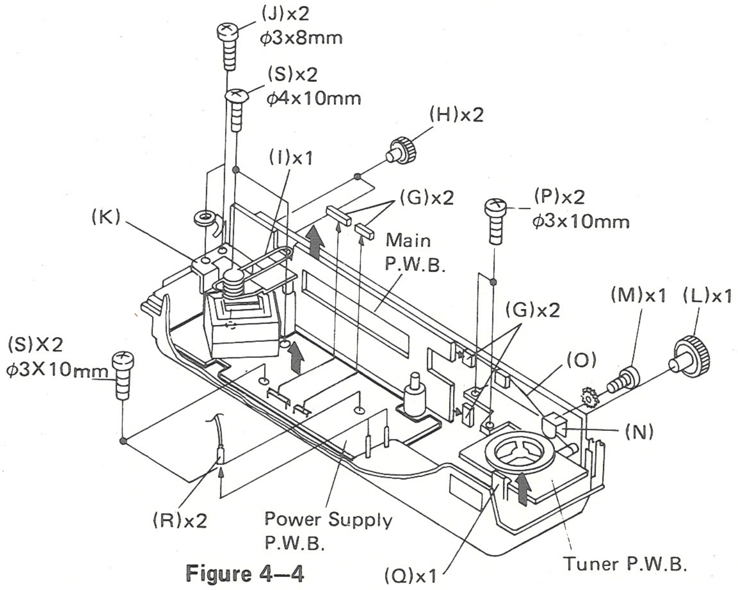

(J)x2
ϕ3x8mm
(S)x2
ϕ4x10mm
(H)x2
(I)x1
(K)
(G)x2
(P)x2
ϕ3x10mm
Main
P.W.B.
(M)x1
(L)x1
(G)x2
(S)X2
ϕ3X10mm
(O)
(N)
(R)x2
Power Supply
P.W.B.
(Q)x1
Tuner P.W.B.

Figure 4–4

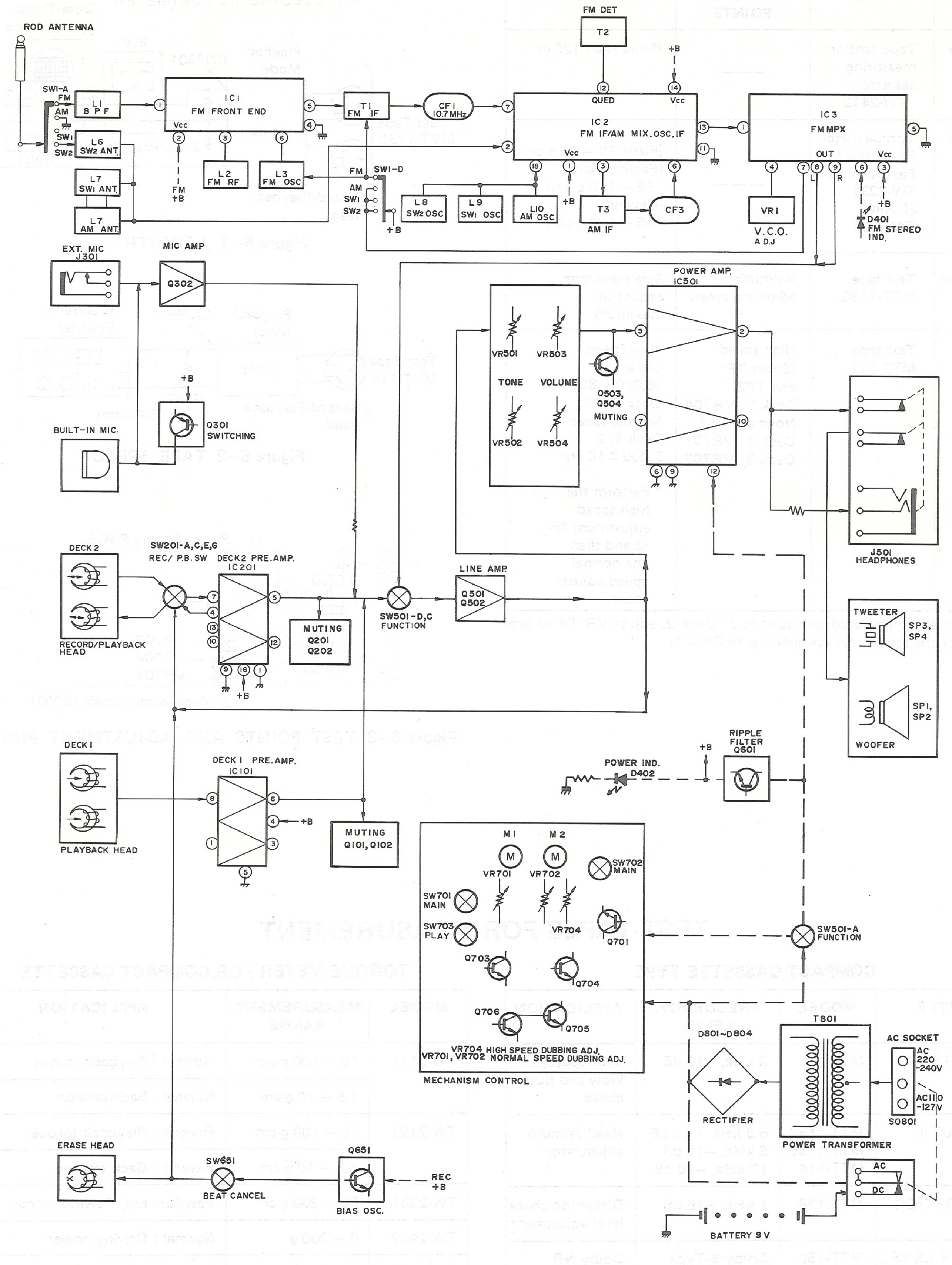

ROD ANTENNA
SWI-A
FM
AM
SWI
SW2
L1 B P F
L6 SW2 ANT.
L7 SWI ANT.
L7 AM ANT.
IC1 FM FRONT END
Vcc
FM +B
L2 FM RF
L3 FM OSC
T1 FM IF
CF1 10.7MHz
FM DET
T2
QUED
+B
Vcc
IC2 FM IF/AM MIX.OSC.IF
SWI-D
L8 SW2 OSC
L9 SWI OSC
L10 AM OSC
T3 AM IF
CF3
IC3 FM MPX
OUT
VR1 V.C.O. ADJ.
D401 FM STEREO IND.
EXT. MIC J301
MIC AMP
Q302
BUILT-IN MIC.
Q301 SWITCHING
POWER AMP. IC501
VR501
VR503
TONE
VOLUME
VR502
VR504
Q503, Q504 MUTING
J501 HEADPHONES
TWEETER
SP3, SP4
SP1, SP2
WOOFER
DECK 2
SW201-A,C,E,G REC/ P.B. SW
DECK2 PRE.AMP. IC201
RECORD/PLAYBACK HEAD
MUTING Q201 Q202
SW501-D,C FUNCTION
LINE AMP.
Q501 Q502
DECK I
DECK I PRE.AMP. IC101
PLAYBACK HEAD
MUTING Q101, Q102
RIPPLE FILTER Q601
POWER IND. D402
M1
M2
VR701
VR702
SW702 MAIN
SW701 MAIN
SW703 PLAY
VR704
Q701
Q703
Q704
Q706
Q705
VR704 HIGH SPEED DUBBING ADJ.
VR701, VR702 NORMAL SPEED DUBBING ADJ.
MECHANISM CONTROL
SW501-A FUNCTION
D801~D804
RECTIFIER
T801
POWER TRANSFORMER
AC SOCKET
AC 220 -240V
AC110 -127V
S0801
AC
DC
BATTERY 9 V
ERASE HEAD
SW651 BEAT CANCEL
Q651 BIAS OSC.
REC +B

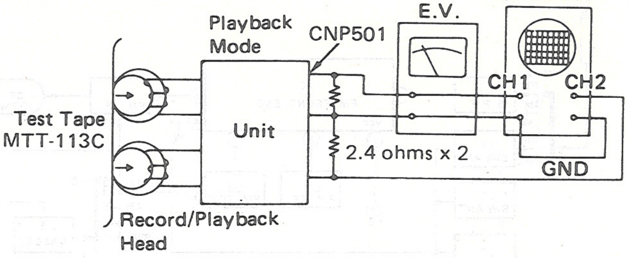
Figure 5 BLOCK DIAGRAM

MECHANICAL ADJUSTMENT

ITEM	JIG	ADJUSTMENT POINTS	REMARKS (CHECK)
Driving power	Tape tention measuring cassette TW-2412	——	(More than 120 g)
Torque	Torque meter Play TW-2111 Fast-forward TW-2231 Rewind TW-2231	——	(Play: 30 – 60 g-cm) (Fast-forward: 55 – 110 g-cm) (Rewind: 55 – 110 g-cm)
Azimuth	Test tape MTT-113C	Azimuth adjusting screw	Sine waveform attains the maximum.
Tape speed	Test tape MTT-111	High speed (Short TP1 and TP2) Deck 2: VR704 Normal speed Deck 1: VR701 Deck 2: VR702	High speed Deck 1: (6,000 ± 800 Hz) Deck 2: *1 Normal speed Deck 1, 2 3,000 ± 10 Hz * Perform the high speed adjustment first and then the normal speed adjustment.

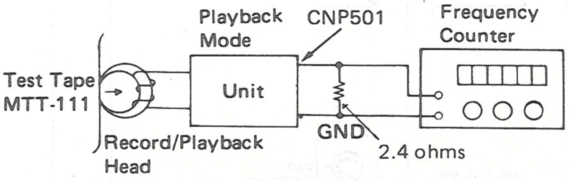
*1. For the high speed adjustment of Deck 2, adjust VR704 to provide the same playback speed as in Deck 1.

E.V: ELECTRONIC VOLTMETER



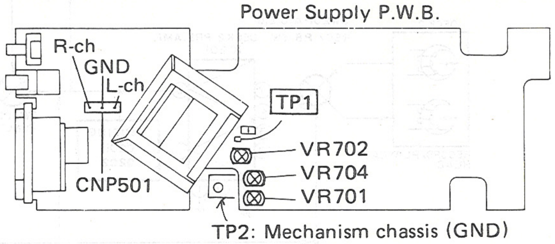
Dual-Trace Syncroscope
E.V.
Playback Mode
CNP501
Test Tape MTT-113C
Unit
CH1
CH2
2.4 ohms x 2
GND
Record/Playback Head

Figure 6–1 AZIMUTH



Playback Mode
CNP501
Frequency Counter
Test Tape MTT-111
Unit
GND
2.4 ohms
Record/Playback Head

Figure 6–2 TAPE SPEED



Power Supply P.W.B.
R-ch
GND
L-ch
TP1
VR702
VR704
VR701
CNP501
TP2: Mechanism chassis (GND)

Figure 6–3 TEST POINTS AND ADJUSTMENT POINTS

TEST TAPES FOR MEASUREMENT

COMPACT CASSETTE TYPE

TITLE	MODEL	FREQUENCY/ LEVEL	APPLICATION
FLUTTER	MTT-111	3 kHz, –10 dB	Tape speed, Wow and flutter check
AZIMUTH	MTT-113 MTT-113C MTT-114	6.3 kHz, –10 dB 8 kHz, –10 dB 10 kHz, –10 dB	Head azimuth adjustment
DISTORTION	MTT-118	1 kHz, –10 dB	Distortion check level adjustment
DOLBY LEVEL CALIBRATION	MTT-150	Dolby B-Type Tone 200 nwb/m	Dolby NR B-type level adjustment
BLANK	MTT-502	——	Record frequency check

TORQUE METER FOR COMPACT CASSETTE

MODEL	MEASUREMENT RANGE	APPLICATION
TW-2111	10 – 100 g-cm	Normal : Playback torque
	1.5 – 10 g-cm	Normal : Back-tension
TW-2121	10 – 100 g-cm	Reverse : Playback torque
	1.5 – 10 g-cm	Reverse : Back tension
TW-2231	30 – 200 g-cm	Fast-forward, Rewind torque
TW-2412	0 – 300 g	Normal : Driving power
TW-2422	0 – 300 g	Reverse : Driving power

STRINGING OF DIAL CORD

1. Turn the drum fully in the direction Ⓐ shown in Fig. 7–2 and stretch its cord over the parts in the numerical order.
2. Then turn the tuning control shaft fully in the direction Ⓑ shown in Fig. 7–2 and fix its pointer as showk in Fig. 7–1.

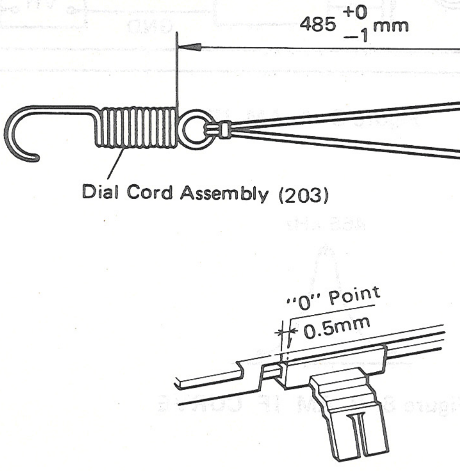

485 $^{+0}_{-1}$ mm
Dial Cord Assembly (203)
"0" Point
0.5mm

Figure 7–1

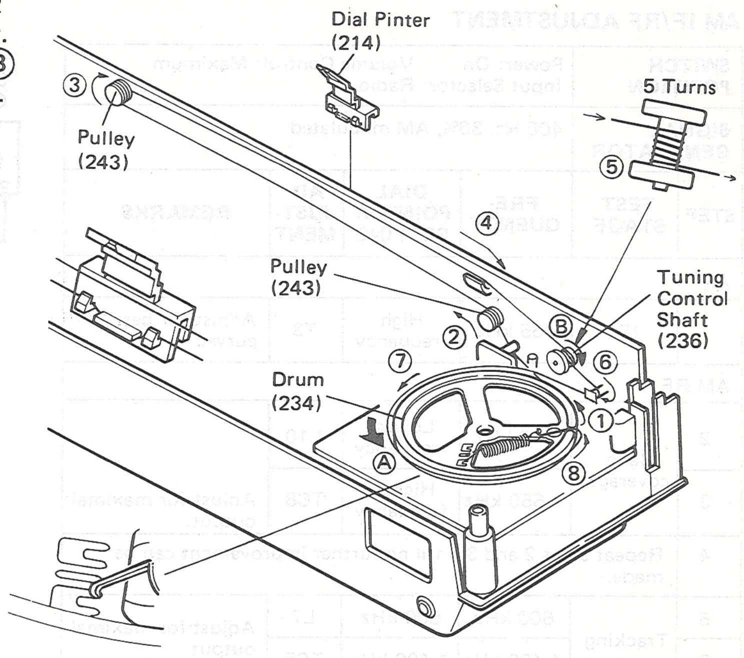

Dial Pinter (214)
③
Pulley (243)
5 Turns
⑤
④
Pulley (243)
②
Ⓑ
⑥
Tuning Control Shaft (236)
⑦
Drum (234)
①
Ⓐ
⑧

Figure 7–2

CIRCUIT ADJUSTMENT (AUDIO SECTION)

SETTING POSITION OF SWITCH AND KNOB	● Volume control: Maximum ● Tone control: Maximum ● Function selector switch: Tape ● Beat cancel switch: A		
ITEM	**INPUT**	**ADJUSTMENT POINT**	**REMARKS (CHECK)**
BIAS OSCILLATION FREQUENCY	———	———	(A = 100 ± 3 kHz) (B = 103 ± 3 kHz) (C = 94 ± 3 kHz)
ERASE CURRENT	———	———	(Normal: 45 ± 5 mV)
PLAYBACK AMPLIFIER SENSITIVITY	Test tape MTT-118	———	(1.3 V ± 3 dB)

E.V: ELECTRONIC VOLTMETER

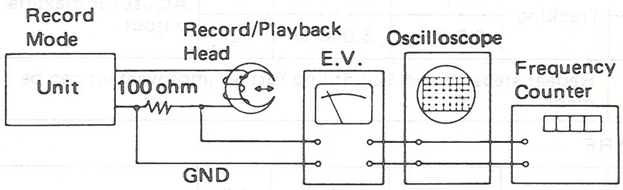

Record Mode
Unit
100 ohm
Record/Playback Head
E.V.
Oscilloscope
Frequency Counter
GND

Figure 7–3 BIAS OSCILLATION FREQUENCY

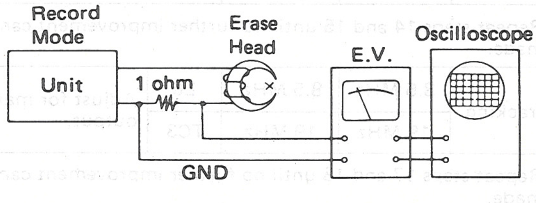

Record Mode
Unit
1 ohm
Erase Head
E.V.
Oscilloscope
GND

Figure 7–4 ERASE CURRENT

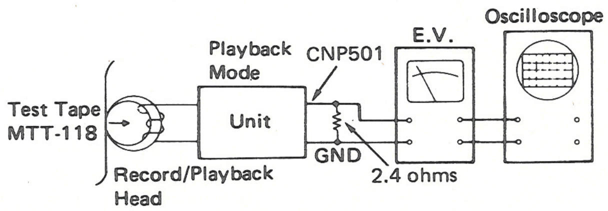

Playback Mode
CNP501
E.V.
Oscilloscope
Test Tape MTT-118
Unit
GND
2.4 ohms
Record/Playback Head

Figure 7–5 PLAYBACK AMPLIFIER SENSITIVITY

CIRCUIT ADJUSTMENT (TUNER SECTION)

AM IF/RF ADJUSTMENT

SWITCH POSITION	Power: On Volume Control: Maximum Input Selector: Radio
SIGNAL GENERATOR	400 Hz, 30%, AM modulated

STEP	TEST STAGE	FRE-QUENCY	DIAL POINTER SETTING	AD-JUST-MENT	REMARKS
AM IF					
1	IF	455 kHz	High frequency	T3	Adjust for best "IF" curve.
AM RF					
2	Band coverage	510 kHz	Lowest frequency	L10	Adjust for maximal output.
3		1,650 kHz	Highest frequency	TC8	
4	Repeat steps 2 and 3 until no further improvement can be made.				
5	Tracking	600 kHz	600 kHz	L7	Adjust for maximal output.
6		1,400 kHz	1,400 kHz	TC5	
7	Repeat steps 5 and 6 until no further improvement can be made.				
SW1 RF					
8	Band coverage	2.25 MHz	Lowest frequency	L9	Adjust for maximal output.
9		7.4 MHz	Highest frequency	TC7	
10	Repeat steps 8 and 9 until no further improvement can be made.				
11	Tracking	2.6 MHz	2.6 MHz	L7	Adjust for maximal output.
12		6.0 MHz	6.0 MHz	TC4	
13	Repeat steps 11 and 12 until no further improvement can be made.				
SW2 RF					
14	Band coverage	7.2 MHz	Lowest frequency	L8	Adjust for maximal output.
15		22.5 MHz	Highest frequency	TC6	
16	Repeat steps 14 and 15 until no further improvement can be made.				
17	Tracking	8.5 MHz	8.5 MHz	L6	Adjust for maximal output.
18		19 MHz	19 MHz	TC3	
19	Repeat steps 17 and 18 until no further improvement can be made.				

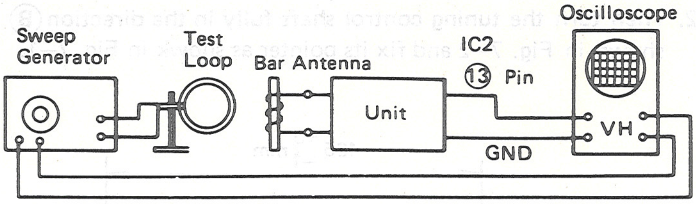

Sweep Generator
Test Loop
Bar Antenna
Unit
IC2
⑬ Pin
Oscilloscope
VH
GND

Figure 8–1 AM IF

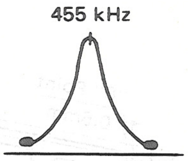


Figure 8–2 AM IF CURVE

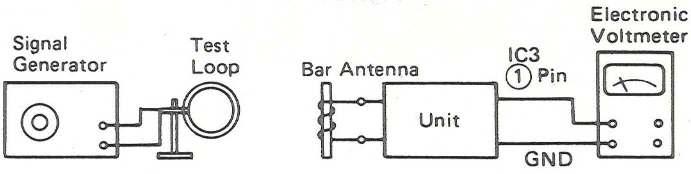

Signal Generator
Test Loop
Bar Antenna
Unit
IC3
① Pin
Electronic Voltmeter
GND

Figure 8–3 AM RF

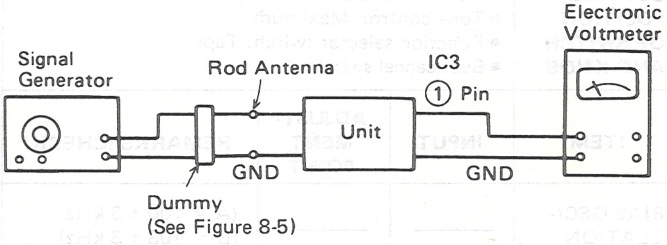

Signal Generator
Rod Antenna
IC3
① Pin
Unit
Electronic Voltmeter
GND
GND
Dummy
(See Figure 8-5)

Figure 8–4 SW_1/SW_2 RF

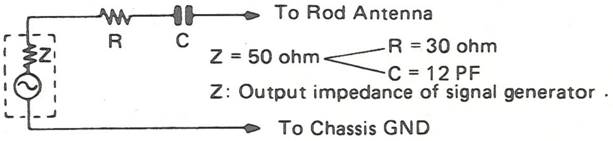

To Rod Antenna
R
C
Z
Z = 50 ohm
R = 30 ohm
C = 12 PF
Z: Output impedance of signal generator.
To Chassis GND

Figure 8–5 SW_1/SW_2 DUMMY

FM IF/RF ADJUSTMENT

SWITCH POSITION	Power: On Input Selector: Radio Band Selector: FM Mode Selector: Stereo Volume Control: Maximum
SIGNAL GENERATOR	400 Hz, 30%, FM modulated

STEP	TEST STAGE	FREQUENCY	DIAL POINTER SETTING	ADJUSTMENT	REMARKS
1	IF	10.7 MHz	High frequency	T1	1. Using a minus driver, turn the core of T2 counterclockwise before taking it out of the bobbin. 2. Adjust for best "IF" curve.
2	Detection			T2	Adjust for best "S" curve.
3	Repeat steps 1 and 2 until no further improvement can be made.				
4	Band coverage	87.1 MHz	Lowest frequency	L3	Adjust for maximal output.
5		109 MHz	Highest frequency	TC2	
6	Repeat steps 4 and 5 until no further improvement can be made.				
7	Tracking	88 MHz	88 MHz	L2	Adjust for maximal output.
8		108 MHz	108 MHz	TC1	
9	Repeat steps 7 and 8 until no further improvement can be made.				

VCO FREQUENCY ADJUSTMENT

SIGNAL GENERATOR	400 Hz, 30%, FM modulated (mono signal)		
FREQUENCY	**DIAL POINTER SETTING**	**ADJUSTMENT**	**REMARKS**
FM mono position		FM stereo position (unmodulated)	
98 MHz at 54 dB	98 MHz	VR1	Adjust for 38 kHz ± 100 Hz.

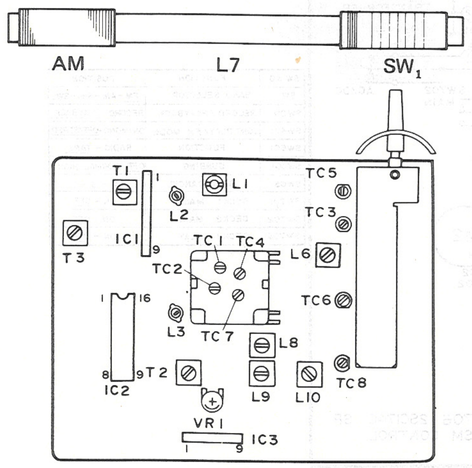

AM
L7
SW1
T1
L1
TC5
L2
TC3
T3
IC1
TC1
TC4
L6
TC2
16
TC6
L3
TC7
L8
8
9
T2
IC2
L9
L10
TC8
VR1
IC3
1
9

Figure 9–7 ADJUSTMENT POINTS

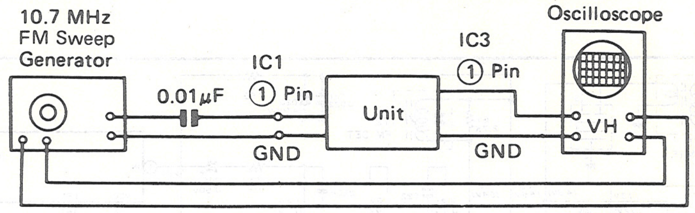

10.7 MHz
FM Sweep
Generator
0.01μF
IC1
① Pin
Unit
GND
IC3
① Pin
GND
Oscilloscope
VH

Figure 9–1 FM IF

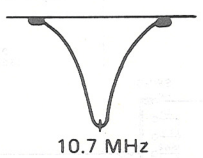


Figure 9–2 FM IF CURVE

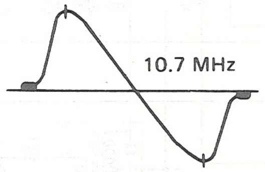


Figure 9–3 FM S CURVE

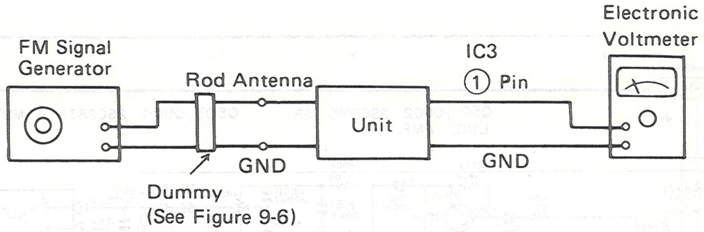

FM Signal
Generator
Rod Antenna
Dummy
(See Figure 9-6)
GND
Unit
IC3
① Pin
GND
Electronic
Voltmeter

Figure 9–4 FM RF

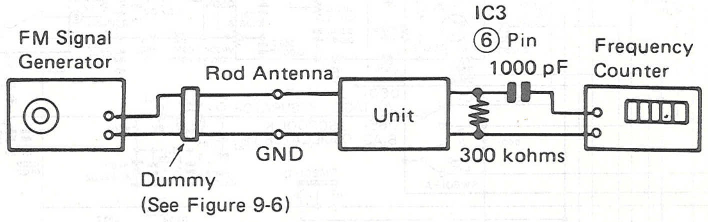

FM Signal
Generator
Rod Antenna
Dummy
(See Figure 9-6)
GND
Unit
IC3
⑥ Pin
1000 pF
300 kohms
Frequency
Counter

Figure 9–5 VCO FREQUENCY

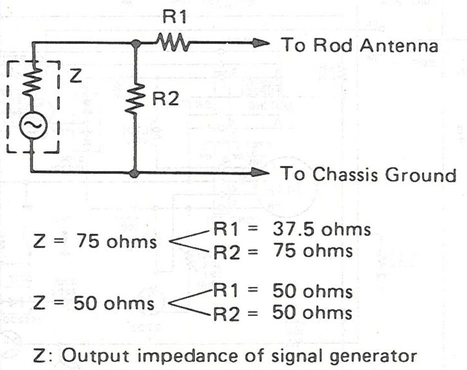
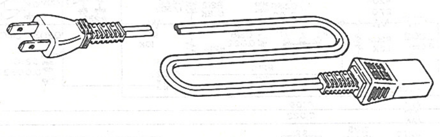
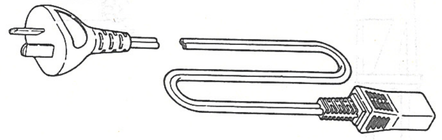
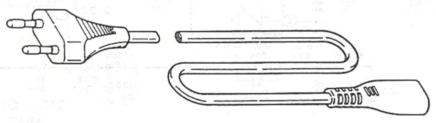

R1
To Rod Antenna
Z
R2
To Chassis Ground
Z = 75 ohms R1 = 37.5 ohms R2 = 75 ohms
Z = 50 ohms R1 = 50 ohms R2 = 50 ohms
Z: Output impedance of signal generator

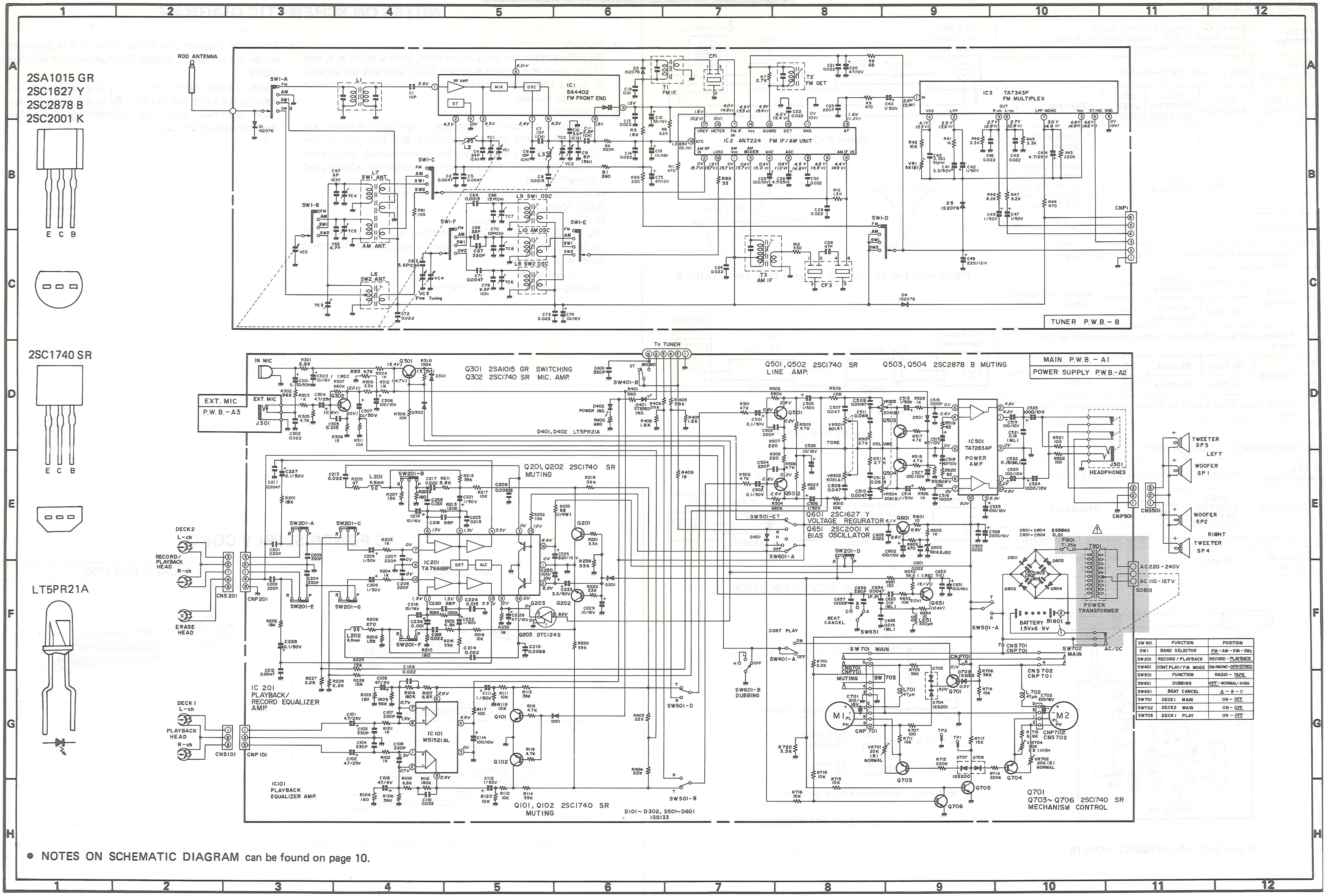
Figure 9–6 FM DUMMY

NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means micro-micro-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression "capacitance/withstand voltage" is used.
  (CH), (RH), (TH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  (   ): AM mode
  Marking except for (   ): FM mode
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- Parts marked with "⚠" (▨) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

AC POWER SUPPLY CORD

QACCZ0059AF00	QACCL0055AF00
	
QACCZ0060AF00	
	


2SA1015 GR
2SC1627 Y
2SC2878 B
2SC2001 K
E C B
2SC1740 SR
E C B
LT5PR21A
ROD ANTENNA
SW1-A
IC1 BA4402 FM FRONT END
RF AMP
MIX
OSC
T1 FM IF.
CF1
T2 FM DET
IC2 AN7224 FM IF/AM UNIT
IC3 TA7343P FM MULTIPLEX
L7 SW1 ANT.
AM ANT.
L6 SW2 ANT.
L9 SW1 OSC
L10 AM OSC
L8 SW2 OSC
VC5 Fine Tuning
T3 AM IF
CF3
CNP1
TUNER P.W.B.- B
To TUNER
IN MIC
EXT. MIC P.W.B.- A3
J301
Q301 2SA1015 GR SWITCHING
Q302 2SC1740 SR MIC. AMP.
D401, D402 LT5PR21A
POWER IND.
STEREO IND.
SW401-B
Q501, Q502 2SC1740 SR LINE AMP.
Q503, Q504 2SC2878 B MUTING
MAIN P.W.B.- A1
POWER SUPPLY P.W.B.- A2
TONE
VOLUME
IC501 TA7283AP POWER AMP
HEADPHONES
J501
TWEETER SP3
LEFT
WOOFER SP1
WOOFER SP2
RIGHT
TWEETER SP4
CNP501
CNS501
Q201, Q202 2SC1740 SR MUTING
IC201 TA7668BP
DET
ALC
Q203 DTC124S
DECK2
RECORD/PLAYBACK HEAD
ERASE HEAD
CNS201
CNP201
SW201-A
SW201-B
SW201-C
SW201-D
SW201-E
SW201-F
SW201-G
IC 201 PLAYBACK/RECORD EQUALIZER AMP
DECK1
PLAYBACK HEAD
CNS101
CNP101
IC101 M51521AL
IC101 PLAYBACK EQUALIZER AMP.
Q101, Q102 2SC1740 SR MUTING
D101~D302, D501~D601 1SS133
SW501-C
SW501-D
SW501-B
SW501-A
Q601 2SC1627 Y VOLTAGE REGURATOR
Q651 2SC2001 K BIAS OSCILLATOR
SW601-A
SW601-B DUBBING
BEAT CANCEL
SW651
D801~D804 S5566G
C801~C804 0.01
F801 T1.25A
T801
POWER TRANSFORMER
AC 220-240V
AC 110-127V
SO801
BATTERY B1801 1.5Vx6 9V
AC/DC
CONT PLAY
SW401-A
SW701 MAIN
SW702 MAIN
SW703
MUTING
M1
M2
CNP701
CNS701
CNS702
CNP702
Q701
Q703~Q706 2SC1740 SR
MECHANISM CONTROL
VR701 20K(B) NORMAL
VR702 20K(B) NORMAL
R716 10K (B) HIGH
1 2 3 4 5 6 7 8 9 10 11 12
A B C D E F G H

SW NO.	FUNCTION	POSITION
SW1	BAND SELECTOR	FM - AM - SW1 - SW2
SW201	RECORD / PLAYBACK	RECORD - PLAYBACK
SW401	CONT. PLAY / FM MODE	ON/MONO - OFF/STREO
SW501	FUNCTION	RADIO - TAPE
SW601	DUBBING	OFF - NORMAL - HIGH
SW651	BEAT CANCEL	A - B - C
SW701	DECK1 MAIN	ON - OFF
SW702	DECK2 MAIN	ON - OFF
SW703	DECK1 PLAY	ON - OFF

- NOTES ON SCHEMATIC DIAGRAM can be found on page 10.

Figure 11 SCHEMATIC DIAGRAM

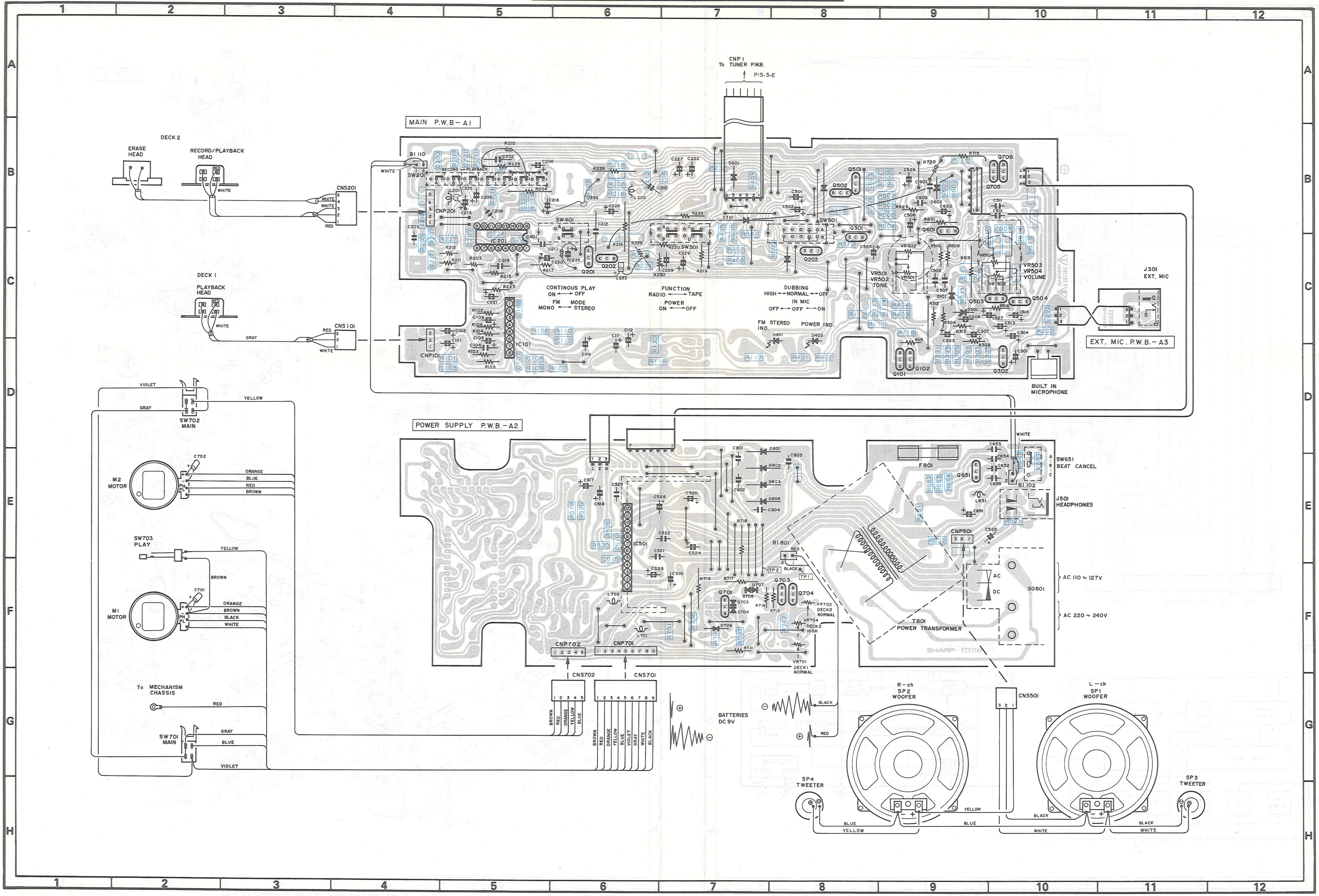
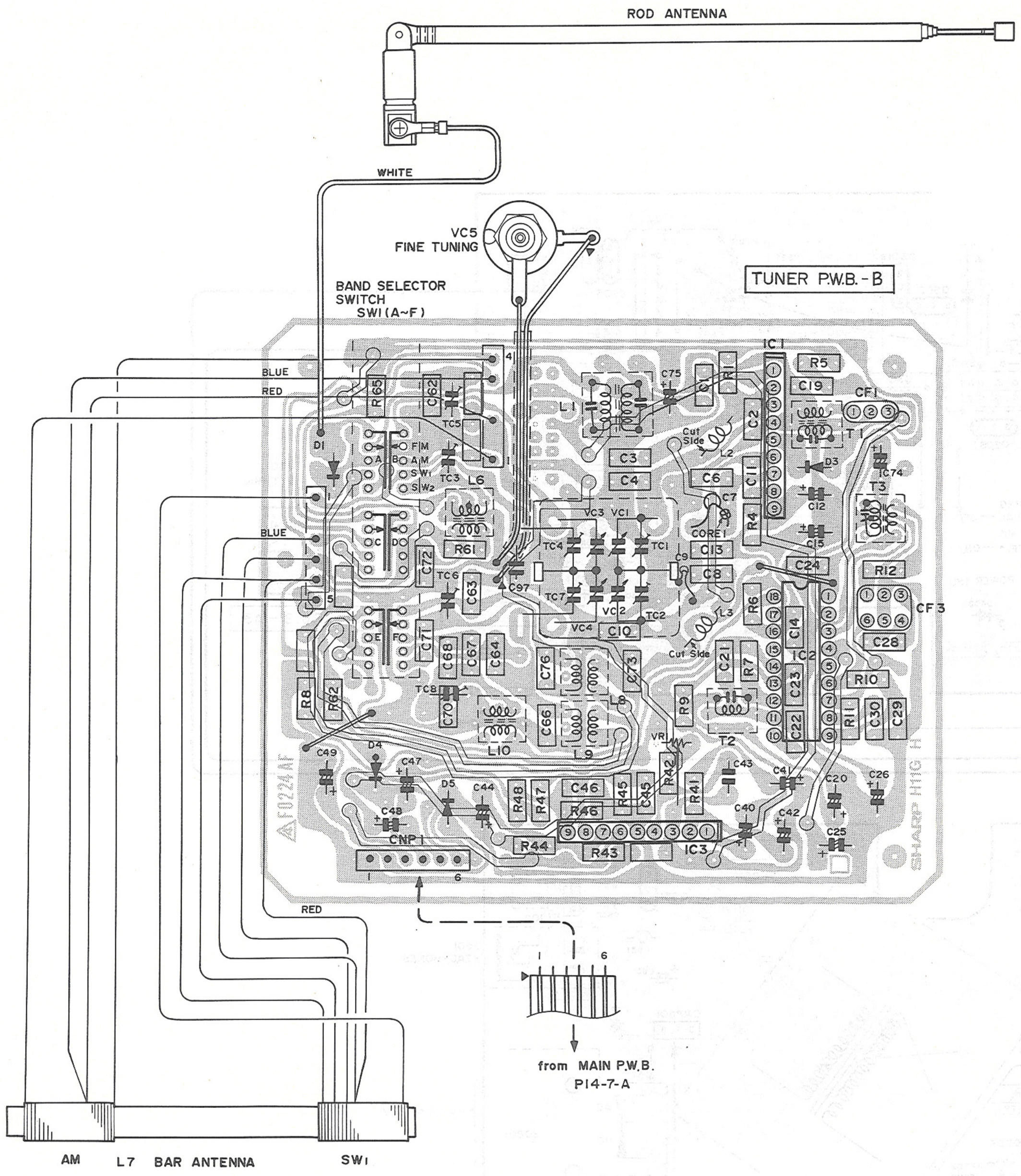
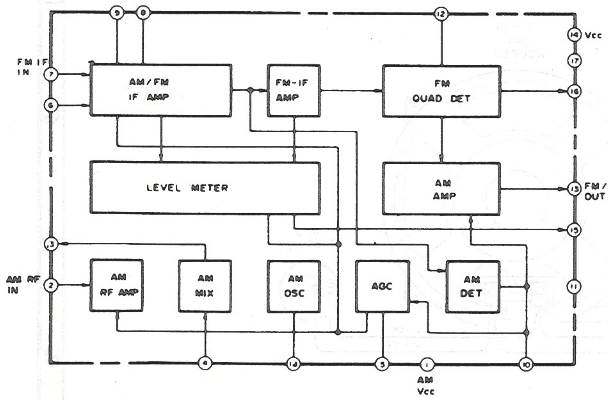

MAIN P.W.B-A1
POWER SUPPLY P.W.B.-A2
EXT. MIC. P.W.B.-A3
CNP1 To TUNER P.W.B. P15-3-E
DECK 2
ERASE HEAD
RECORD/PLAYBACK HEAD
CNS201
CNP201
SW201
B1 110
DECK 1
PLAYBACK HEAD
CNS101
CNP101
IC201
IC101
SW401
SW501
SW601
CONTINOUS PLAY ON ← → OFF
FM MODE MONO ← → STEREO
FUNCTION RADIO ← → TAPE
POWER ON ← → OFF
DUBBING HIGH ← NORMAL → OFF
IN MIC OFF ← OFF → ON
FM STEREO IND.
POWER IND.
VR501 VR502 TONE
VR503 VR504 VOLUME
J301 EXT. MIC
BUILT IN MICROPHONE
SW702 MAIN
M2 MOTOR
SW703 PLAY
M1 MOTOR
SW701 MAIN
To MECHANISM CHASSIS
IC501
F801
SW651 BEAT CANCEL
B1 102
J501 HEADPHONES
CNP501
S0801
AC 110 ~ 127V
AC 220 ~ 240V
T801 POWER TRANSFORMER
VR702 DECK2 NORMAL
VR704 DECK2 HIGH
VR701 DECK1 NORMAL
CNP702
CNP701
CNS702
CNS701
CNS501
BATTERIES DC 9V
R-ch SP2 WOOFER
L-ch SP1 WOOFER
SP4 TWEETER
SP3 TWEETER
WHITE
RED
GRAY
VIOLET
YELLOW
ORANGE
BLUE
BROWN
BLACK
1 2 3 4 5 6 7 8 9 10 11 12
A B C D E F G H

Figure 13 WIRING SIDE OF P.W. BOARD


ROD ANTENNA
WHITE
VC5
FINE TUNING
BAND SELECTOR
SWITCH
SW1(A~F)
TUNER P.W.B.-B
BLUE
RED
BLUE
RED
IC1
IC2
IC3
CF1
CF3
T1
T2
T3
L1
L2
L3
L6
L8
L9
L10
VR1
D1
D3
D4
D5
CNP1
F0224AF
SHARP
from MAIN P.W.B.
P14-7-A
AM
L7 BAR ANTENNA
SW1

AN7224


AM/FM
IF AMP
FM-IF
AMP
FM
QUAD DET
LEVEL METER
AM
AMP
AM
RF AMP
AM
MIX
AM
OSC
AGC
AM
DET
FM IF
IN
AM RF
IN
Vcc
FM/AM
OUT
AM
Vcc
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17

TA7343AP

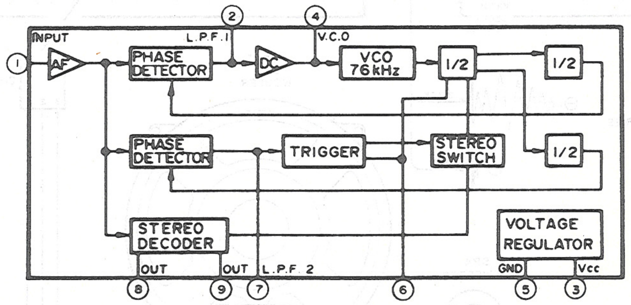
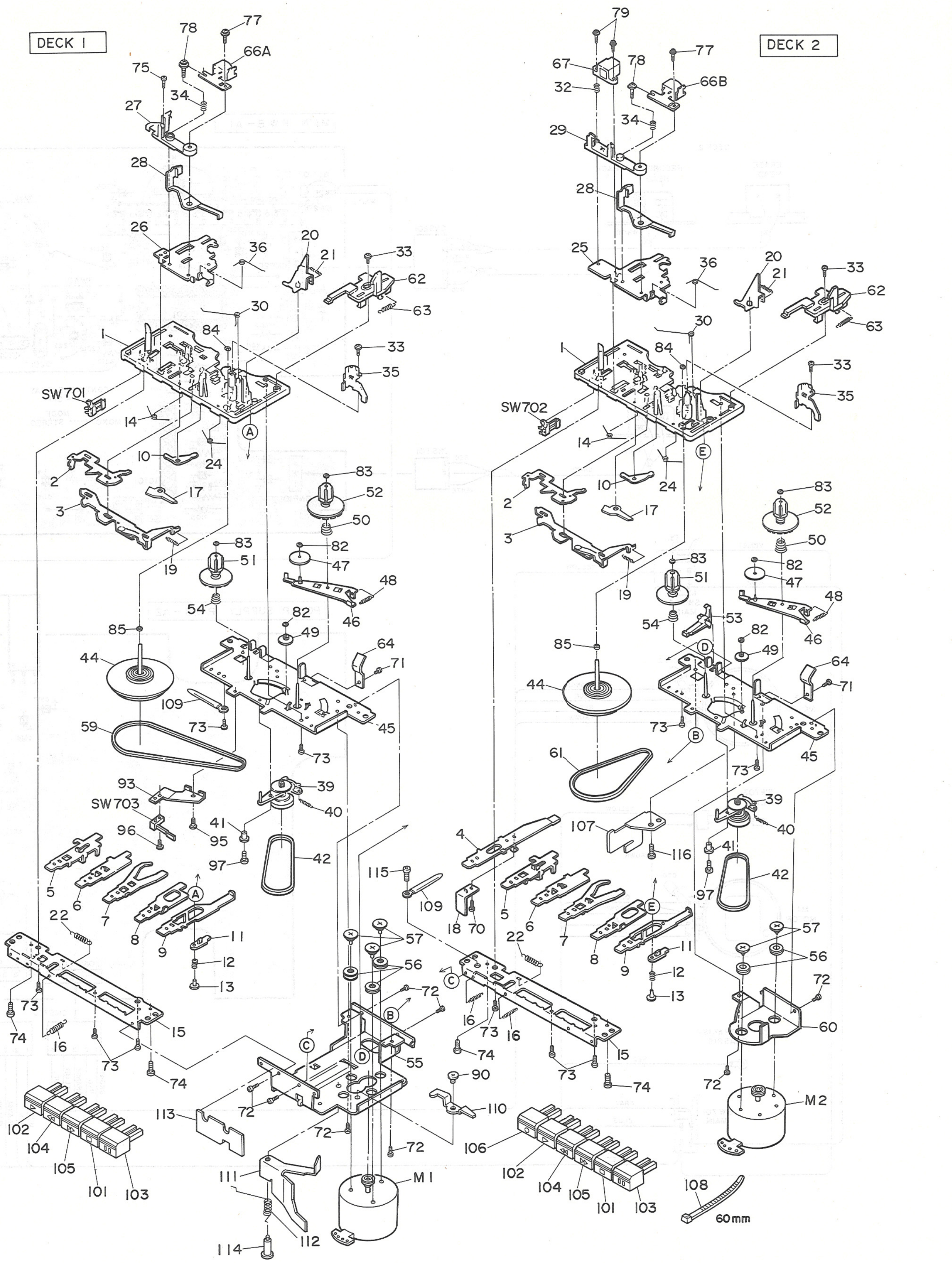

INPUT
L.P.F.1
V.C.O
AF
PHASE
DETECTOR
DC
VCO
76kHz
1/2
1/2
PHASE
DETECTOR
TRIGGER
STEREO
SWITCH
1/2
STEREO
DECODER
VOLTAGE
REGULATOR
OUT
OUT
L.P.F 2
GND
Vcc
1
2
3
4
5
6
7
8
9

Figure 15 WIRING SIDE OF P.W. BOARD


DECK 1
DECK 2
SW701
SW702
SW703
66A
66B
M1
M2
60mm
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
24
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48
49
50
51
52
53
54
55
56
57
59
60
61
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63
64
67
70
71
72
73
74
75
77
78
79
82
83
84
85
90
93
95
96
97
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
A
B
C
D
E

Figure 16 MECHANISM EXPLODED VIEW

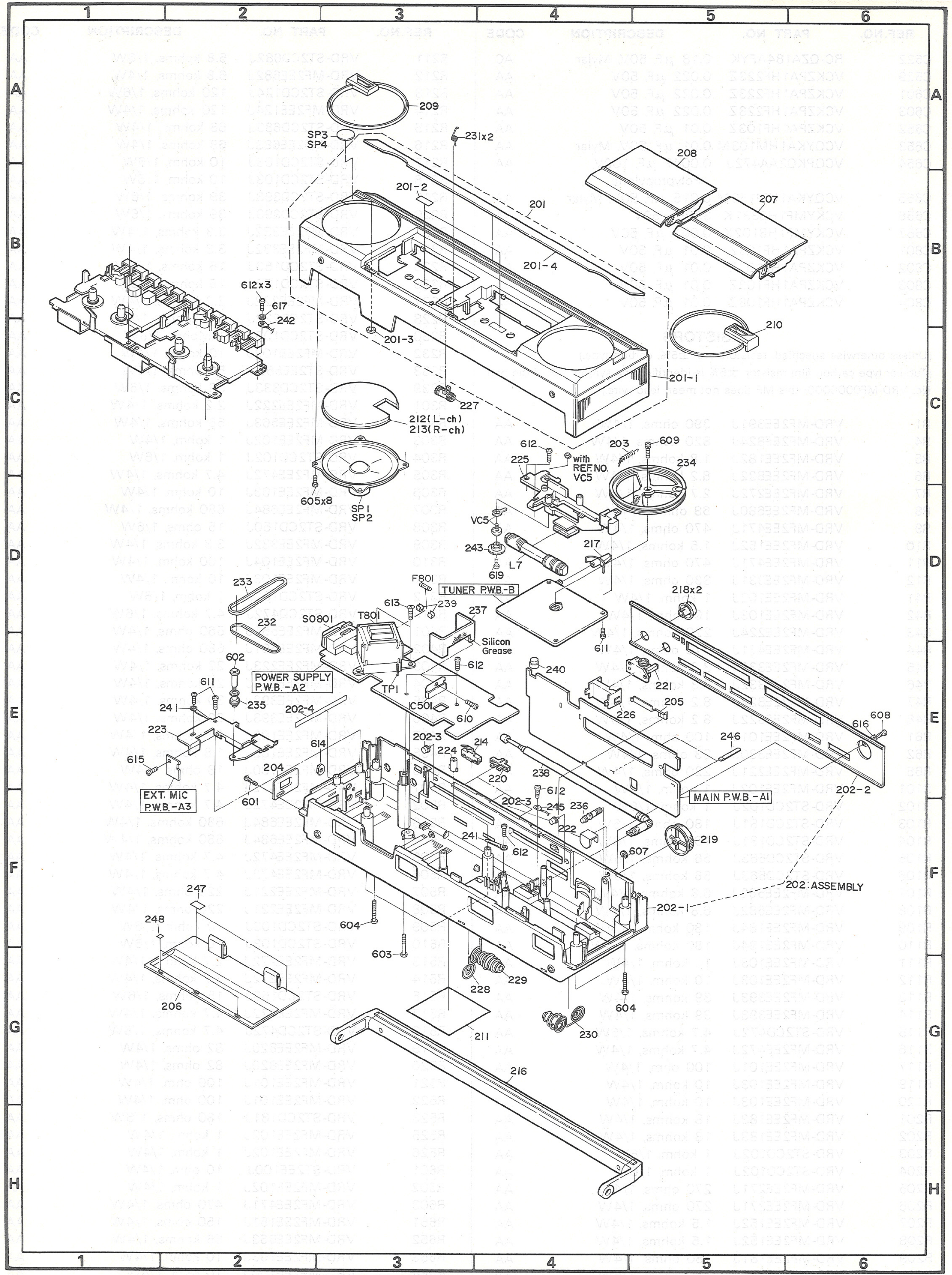
1
2
3
4
5
6
A
B
C
D
E
F
G
H
209
SP3
SP4
231x2
208
201-2
201
207
201-4
612x3
617
242
201-3
210
201-1
212(L-ch)
213(R-ch)
227
612
225
203
609
with REF.NO. VC5
234
605x8
SP1
SP2
VC5
243
L7
217
F801
619
TUNER P.W.B.-B
218x2
233
613
239
237
232
S0801
T801
Silicon Grease
612
611
602
POWER SUPPLY P.W.B.-A2
240
221
611
TP1
IC501
610
205
235
241
202-4
226
608
616
223
614
202-3
214
224
246
615
204
220
238
612
EXT. MIC P.W.B.-A3
601
202-3
245
236
202-2
MAIN P.W.B.-A1
241
222
612
607
219
202: ASSEMBLY
247
248
604
202-1
603
229
228
604
206
211
230
216

Figure 17 CABINET EXPLODED VIEW

REPLACEMENT PARTS LIST

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

INTEGRATED CIRCUITS

REF.NO.	PART NO.	DESCRIPTION	CODE
IC1	VHiBA4402//-1	FM Front-End, BA4402	AF
IC2	VHiAN7224//-1	FM IF/AM Circuit, AN7224	AH
IC3	VHiTA7343P/-1	PLL FM Stereo Multiplex, TA7343P	AG
IC101	VHiM51521AL-1	Pre Amp., M51521AL	AE
IC201	VHiTA7668BP-1	Record/Playback Amp., TA7668BP	AK
IC501	VHiTA7283AP-1	Power Amp., TA7283AP	AK

TRANSISTORS

REF.NO.	PART NO.	DESCRIPTION	CODE
Q101	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q102	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q201	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q202	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q203	VSDTC124S//-1	Silicon, NPN, DTC124 S	AB
Q301	VS2SA1015GR-1	Silicon, PNP, 2SA1015 GR	AB
Q302	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q501	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q502	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q503	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
Q504	VS2SC2878B/-1	Silicon, NPN, 2SC2878 B	AC
Q601	VS2SC1627Y/-1	Silicon, NPN, 2SC1627 Y	AD
Q651	VS2SC2001-K-1	Silicon, NPN, 2SC2001 K	AB
Q701	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q703	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q704	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q705	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB
Q706	VS2SC1740SR-1	Silicon, NPN, 2SC1740 SR	AB

DIODES

REF.NO.	PART NO.	DESCRIPTION	CODE
D1	VHD1S2076RE-1	Silicon, 1S2076	AA
D3	VHD1S2076RE-1	Silicon, 1S2076	AA
D4	VHD1S2076RE-1	Silicon, 1S2076	AA
D5	VHD1S2076RE-1	Silicon, 1S2076	AA
D101	VHD1SS133//-1	Silicon, 1SS133	AA
D201	VHD1SS133//-1	Silicon, 1SS133	AA
D301	VHD1SS133//-1	Silicon, 1SS133	AA
D302	VHD1SS133//-1	Silicon, 1SS133	AA
D401	VHPLT5PR21A-1	LED, Red, LT5PR21A	AB
D402	VHPLT5PR21A-1	LED, Red, LT5PR21A	AB
D501	VHD1SS133//-1	Silicon, 1SS133	AA
D601	VHD1SS133//-1	Silicon, 1SS133	AA
D602	VHERD6R8JB2-1	Zener, 6.8V, RD6.8JB2	AB
D703/704	VHD1SS201//-1	Silicon, 1SS201	AB
D707/708	VHD1SS200//-1	Silicon, 1SS200	AB
D709	VHD1SS133//-1	Silicon, 1SS133	AA
D801	VHDS5566G//-1	Silicon, S5566G	AB
D802	VHDS5566G//-1	Silicon, S5566G	AB
D803	VHDS5566G//-1	Silicon, S5566G	AB
D804	VHDS5566G//-1	Silicon, S5566G	AB

COILS

REF.NO.	PART NO.	DESCRIPTION	CODE
L1	RCiLA0620AFZZ	FM Band Pass Filter	AC
L2	RCiLB0672AFZZ	FM RF	AC
L3	RCiLB0672AFZZ	FM RF	AC
L6	RCiLA0556AFZZ	SW2 Antenna	AD
L7	RCiLA0783AFZZ	Bar Antenna, AM/SW1	AL
L8	RCiLB0625AFZZ	SW2 Oscillator	AC
L9	RCiLB0624AFZZ	LW Local Oscillation	AC
L10	RCiLB0623AFZZ	MW Local Oscillation	AC
L201	RCiLZ0129AFZZ	Choke, 6.8 mH	AC
L202	RCiLZ0129AFZZ	Choke, 6.8 mH	AC
L651	VP-MK331K0000	330 µH	AB
L701	RCiLF0014AGZZ	47 µH, Choke	AB
L702	RCiLF0014AGZZ	47 µH, Choke	AB

TRANSFORMERS

REF.NO.	PART NO.	DESCRIPTION	CODE
T1	RCiLi0324AFZZ	FM IF	AC
T2	RCiLi0312AFZZ	FM Detector	AC
T3	RCiLi0310AFZZ	AM IF	AC
⚠T801	RTRNP1171AFZZ	Power	AT

FILTERS

REF.NO.	PART NO.	DESCRIPTION	CODE
CF1	RFiLF0080AFZZ	Ceramic, FM IF 10.7 MHz	AD
CF3	RFiLA0085AFZZ	Ceramic, AM IF, 455 kHz	AE

CONTROLS

REF.NO.	PART NO.	DESCRIPTION	CODE
VC1～4	RVC-R0096AFZZ	Variable Capacitors, Tuning with Trimmers: TC1, 2, 4, 7	AN
VC5	RVC-Z0062AFZZ	Fine Tuning	AF
TC3	RTō-H1072AFZZ	Trimmer	AC
TC5	RTō-H1072AFZZ	Trimmer	AC
TC6	RTō-H1072AFZZ	Trimmer	AC
TC8	RTō-H1072AFZZ	Trimmer	AC
VR1	RVR-M0390AFZZ	5 kohms(B)	AB
VR501/502	RVR-A0199AFZZ	50 kohms (A)	AE
VR503/504	RVR-B0311AFZZ	20 kohms(B)	AG
VR701	RVR-M0449AFZZ	20 kohms (B)	AB
VR702	RVR-M0449AFZZ	20 kohms (B)	AB
VR704	RVR-M0448AFZZ	10 kohm (B)	AB

ELECTROLYTIC CAPACITORS

(All electrolytic capacitors are ±20% type.)

REF.NO.	PART NO.	DESCRIPTION	CODE
C12	RC-EZA336AF1C	33 µF, 16V	AB
C15	RC-EZA106AF1C	10 µF, 16V	AB
C20	RC-EZA476AF1A	47 µF, 10V	AB
C25	RC-EZA107AF1A	100 µF, 10V	AB
C26	RC-EZA475AF1E	4.7 µF, 25V	AB
C40	RC-EZA106AF1C	10 µF, 16V	AB
C41	RC-EZA335AF1H	3.3 µF, 50V	AB
C42	RC-EZA105AF1H	1 µF, 50V	AB
C44	RC-EZA475AF1E	4.7 µF, 25V	AB

REF.NO.	PART NO.	DESCRIPTION	CODE
C47	RC-EZA105AF1H	1 μF, 50V	AB
C48	RC-EZA105AF1H	1 μF, 50V	AB
C49	RC-EZA227AF1A	220 μF, 10V	AB
C74	RC-EZA106AF1C	10 μF, 16V	AB
C75	RC-EZA476AF1A	47 μF, 10V	AB
C101	RC-EZD475AF1E	4.7 μF, 25V	AB
C102	RC-EZD475AF1E	4.7 μF, 25V	AB
C105	RC-EZB476AF0G	47 μF, 4V	AB
C106	RC-EZB476AF0G	47 μF, 4V	AB
C111	RC-EZY105AF1H	1 μF, 50V	AB
C112	RC-EZY105AF1H	1 μF, 50V	AB
C114	RC-EZY107AF1A	100 μF, 10V	AB
C205	RC-EZY105AF1H	1 μF, 50V	AB
C206	RC-EZY105AF1H	1 μF, 50V	AB
C215	RC-EZY106AF1C	10 μF, 16V	AB
C216	RC-EZY106AF1C	10 μF, 16V	AB
C221	RC-EZA105AF1H	1 μF, 50V	AB
C222	RC-EZY105AF1H	1 μF, 50V	AB
C225	RC-GZA337AF1C	330 μF, 16V	AC
C226	RC-EZA476AF1A	47 μF, 10V	AB
C227	RC-EZY104AF1H	0.1 μF, 50V	AB
C228	RC-EZA104AF1H	0.1 μF, 50V	AB
C229	RC-EZA106AF1C	10 μF, 16V	AB
C230	RC-GZA107AF1A	100 μF, 10V	AC
C233	RC-EZS335AF1E	3.3 μF, 25V	AB
C301	RC-EZY334AF1H	0.33 μF, 50V	AB
C303	RC-EZA106AF1C	10 μF, 16V	AB
C304	RC-EZA475AF1E	4.7 μF, 25V	AB
C306	RC-GZA107AF1A	100 μF, 10V	AC
C307	RC-EZA104AF1H	0.1 μF, 50V	AB
C501	RC-EZY104AF1H	0.1 μF, 50V	AB
C502	RC-EZY104AF1H	0.1 μF, 50V	AB
C505	RC-EZA105AF1H	1 μF, 50V	AB
C506	RC-EZA105AF1H	1 μF, 50V	AB
C513	RC-EZA105AF1H	1 μF, 50V	AB
C514	RC-EZA105AF1H	1 μF, 50V	AB
C517	RC-EZA476AF1A	47 μF, 10V	AB
C518	RC-EZA476AF1A	47 μF, 10V	AB
C519	RC-GZA107AF1A	100 μF, 10V	AC
C520	RC-GZA107AF1A	100 μF, 10V	AC
C523	RC-GZV108AF1A	1000 μF, 10V	AD
C524	RC-GZV108AF1A	1000 μF, 10V	AD
C525	RC-GZA107AF1C	100 μF, 16V	AB
C526	RC-EZY106AF1C	10 μF, 16V	AB
C527	RC-GZA107AF1A	100 μF, 10V	AC
C528	RC-EZ1267AFZZ	2200 μF, 16V	AE
C602	RC-GZA107AF1A	100 μF, 10V	AC
C651	RC-GZA107AF1C	100 μF, 16V	AB
C701	RC-GZS107AF1C	100 μF, 16V	AB
C702	RC-GZS107AF1C	100 μF, 16V	AB

CAPACITORS

There are two types of capacitors available and they can be identified from each other by reading their Part Numbers.

- ● Ceramic type capacitor;
  A symbol "C" or "K" is given at the 3rd digit of its Part Number like "VCC (or K)●●●●●●●●J."
- ● Semiconductor type capacitor;
  A symbol "T" is given at the 3rd digit of its Part Number like "VCT●●●●●●●J."

The capacitance error of each capacitor is indicated by the symbol given at the 13th digit of the Part Number as follows: "J" (±5%), "K" (±10%), "M" (±20%), "N" (±30%), "C" (±0.25 pF), "D" (±0.5 pF), "Z" (+80−20%).

(Tubular type ceramic capacitor is identified by the symbol MF of the part No. VC00MF0000000; this MF does not mean the lead wire.)

REF.NO.	PART NO.	DESCRIPTION	CODE
C1	VCCSMF1HL100J	10 pF, 50V	AA
C2	VCTYMF1HV472K	0.0047 μF, 50V	AA
C3	VCTYMF1HV472K	0.0047 μF, 50V	AA
C4	VCCCMF1HH240J	24 pF(CH), 50V	AA
C6	VCCCMF1HH150J	15 pF(CH), 50V	AA
C7	VCCCPU1HH100J	10 pF(CH), 50V	AA
C8	VCTYMF1HV152K	0.0015 μF, 50V	AA
C9	VCCRPU1HH8R0D	8 pF(RH), 50V	AA
C10	VCCCMF1HH3R9C	3.9 pF(CH), 50V	AA
C11	VCCCMF1HH2R2C	2.2 pF(CH), 50V	AA
C13	VCTYMF1CY223N	0.022 μF, 16V	AA
C14	VCTYMF1CY223N	0.022 μF, 16V	AA
C19	VCTYMF1EX103N	0.01 μF, 25V	AA
C21	VCTYMF1CY223N	0.022 μF, 16V	AB
C22	VCTYMF1CY223N	0.022 μF, 16V	AA
C23	VCKYMF1HB221K	220 pF, 50V	AA
C24	VCTYMF1CY223N	0.022 μF, 16V	AA
C28	VCCSMF1HL470J	47 pF, 50V	AA
C29	VCTYMF1CY223N	0.022 μF, 16V	AA
C30	VCTYMF1CY223N	0.022 μF, 16V	AA
C43	VCQSMA1HL102J	0.001 μF, 50V, Styrol	AB
C45	VCTYMF1CY223N	0.022 μF, 16V	AA
C46	VCTYMF1CY223N	0.022 μF, 16V	AA
C62	VCCSMF1HL4R7C	4.7 pF, 50V	AA
C63	VCCCMF1HH5R6D	5.6 pF(CH), 50V	AA
C64	VCKYMF1HV152K	0.0015 μF, 50V	AA
C66	VCCCMF1HH150J	15 pF(CH), 50V	AA
C67	VCKYMF1HB331J	330 pF, 50V	AA
C68	VCCSMF1HL330J	33 pF, 50V	AA
C70	VCCCMF1HH100J	10 pF(CH), 50V	AA
C71	VCTYMF1HV472K	0.0047 μF, 50V	AA
C72	VCTYMF1CY223N	0.022 μF, 16V	AA
C73	VCTYMF1CY223N	0.022 μF, 16V	AA
C76	VCCCMF1HH6R8D	6.8 pF(CH), 50V	AA
C97	VCCCPU1HH6R0D	6 pF(CH), 50V	AA
C103	VCKYMF1HB331K	330 pF, 50V	AA
C104	VCKYDT1HB331K	330 pF, 50V	AA
C107	VCKYMF1HB221K	220 pF, 50V	AA
C108	VCKYMF1HB221K	220 pF, 50V	AA
C109	VCTYMF1CY223M	0.022 μF, 16V	AB
C110	VCTYMF1CY223M	0.022 μF, 16V	AB
C201	VCKYMF1HB221K	220 pF, 50V	AA
C202	VCKYDT1HB221K	220 pF, 50V	AA
C203	VCKYMF1HB331K	330 pF, 50V	AA
C204	VCKYMF1HB331K	330 pF, 50V	AA
C207	VCKYMF1HB221K	220 pF, 50V	AA
C208	VCKYPV1HB221K	220 pF, 50V	AA
C209	VCTYPV1EX682K	0.0068 μF, 25V	AA
C210	VCTYDT1EX682M	0.0068 μF, 25V	AA
C211	VCTYBT1CX472M	0.0047 μF, 16V	AA
C212	VCTYDT1EX472M	0.0047 μF, 25V	AA
C213	VCTYMF1CY223M	0.022 μF, 16V	AA
C214	VCTYMF1CY223M	0.022 μF, 16V	AA
C217	VCTYMF1CY223M	0.022 μF, 16V	AA
C218	VCTYMF1CY223M	0.022 μF, 16V	AB
C219	VCCSBT1HL680J	68 pF, 50V	AA
C220	VCCSMF1HL680J	68 pF, 50V	AA
C223	VCTYMF1EX153M	0.015 μF, 25V	AA
C224	VCTYMF1EX153M	0.015 μF, 25V	AA
C235	VCKZPU1HF102Z	0.001 μF, 50V	AA
C236	VCKZPU1HF102Z	0.001 μF, 50V	AA
C302	VCTYMF1CY223N	0.022 μF, 16V	AA
C305	VCTYMF1EX153N	0.015 μF, 25V	AA
C401	VCKYPU1HB331K	330 pF, 50V	AA
C503	VCKYMF1HB221K	220 pF, 50V	AA
C504	VCKYMF1HB221K	220 pF, 50V	AA
C507	VCTYPA1EX473K	0.047 μF, 25V	AA
C508	VCTYPA1EX473K	0.047 μF, 25V	AA
C509	VCTYMF1HV472K	0.0047 μF, 50V	AA
C510	VCTYMF1HV472K	0.0047 μF, 50V	AA
C511	VCTYPA1EX683K	0.068 μF, 25V	AB
C512	VCTYPA1EX683K	0.068 μF, 25V	AB
C515	VCKYMF1HB102K	0.001 μF, 50V	AA
C516	VCKYMF1HB102K	0.001 μF, 50V	AA
C521	RC-QZA184AFYK	0.18 μF, 50V, Mylar	AC
C522	RC-QZA184AFYK	0.18 μF, 50V, Mylar	AC
C529	VCKZPA1HF223Z	0.022 μF, 50V	AA
C601	VCKZPA1HF223Z	0.022 μF, 50V	AA
C603	VCKZPA1HF223Z	0.022 μF, 50V	AA
C652	VCKZPA1HF103Z	0.01 μF, 50V	AA
C653	VCQYKA1HM103M	0.01 μF, 50V, Mylar	AA
C654	VCQPKQ2AA472J	0.0047 μF, 100V, Polypropylene	AA
C655	VCQYKA1HM153M	0.015 μF, 50V, Mylar	AA
C656	VCKYMF1HB331K	330pF, 50V	AA
C657	VCKYMF1HB102K	0.001 μF, 50V	AA
C801	VCKZPA1HF103Z	0.01 μF, 50V	AA
C802	VCKZPA1HF103Z	0.01 μF, 50V	AA
C803	VCKZPA1HF103Z	0.01 μF, 50V	AA
C804	VCKZPA1HF103Z	0.01 μF, 50V	AA

RESISTORS

(Unless otherwise specified, resistors are ±5%, carbon type.)
(Tubular type carbon film resistor ±5% is identified the symbol MF of the part No. VRD-MF0000000; this MF does not mean lead wire.)

REF.NO.	PART NO.	DESCRIPTION	CODE
R1	VRD-MF2EE391J	390 ohms, 1/4W	AA
R4	VRD-MF2EE824J	820 kohms, 1/4W	AA
R5	VRD-MF2EE182J	1.8 kohms, 1/4W	AA
R6	VRD-MF2EE822J	8.2 kohms, 1/4W	AA
R7	VRD-MF2EE272J	2.7 kohms, 1/4W	AA
R8	VRD-MF2EE680J	68 ohms, 1/4W	AA
R9	VRD-MF2EE471J	470 ohms, 1/4W	AA
R10	VRD-MF2EE152J	1.5 kohms, 1/4W	AA
R11	VRD-MF2EE471J	470 ohms, 1/4W	AA
R12	VRD-MF2EE331J	330 ohms, 1/4W	AA
R41	VRD-MF2EE102J	1 kohm, 1/4W	AA
R42	VRD-MF2EE103J	10 kohm, 1/4W	AA
R43	VRD-MF2EE224J	220 kohms, 1/4W	AA
R44	VRD-MF2EE471J	470 ohms, 1/4W	AA
R45	VRD-MF2EE332J	3.3 kohms, 1/4W	AA
R46	VRD-MF2EE332J	3.3 kohms, 1/4W	AA
R47	VRD-MF2EE822J	8.2 kohms, 1/4W	AA
R48	VRD-MF2EE822J	8.2 kohms, 1/4W	AA
R61	VRD-MF2EE101J	100 ohm, 1/4W	AA
R62	VRD-MF2EE330J	33 ohms, 1/4W	AA
R65	VRD-MF2EE221J	220 ohms, 1/4W	AA
R101	VRD-MF2EE102J	1 kohm, 1/4W	AA
R102	VRD-ST2CD102J	1 kohm, 1/6W	AA
R103	VRD-ST2CD181J	180 ohms, 1/6W	AA
R104	VRD-ST2CD181J	180 ohms, 1/6W	AA
R105	VRD-ST2CD563J	56 kohms, 1/6W	AA
R106	VRD-ST2CD563J	56 kohms, 1/6W	AA
R107	VRD-MF2EE682J	6.8 kohms, 1/4W	AA
R108	VRD-MF2EE682J	6.8 kohms, 1/4W	AA
R109	VRD-MF2EE184J	180 kohms, 1/4W	AA
R110	VRD-MF2EE184J	180 kohms, 1/4W	AA
R111	VRD-MF2EE103J	10 kohm, 1/4W	AA
R112	VRD-MF2EE103J	10 kohm, 1/4W	AA
R113	VRD-MF2EE393J	39 kohms, 1/4W	AA
R114	VRD-MF2EE393J	39 kohms, 1/4W	AA
R115	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R116	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R117	VRD-MF2EE101J	100 ohm, 1/4W	AA
R119	VRD-MF2EE103J	10 kohm, 1/4W	AA
R120	VRD-MF2EE103J	10 kohm, 1/4W	AA
R201	VRD-MF2EE183J	18 kohms, 1/4W	AA
R202	VRD-MF2EE183J	18 kohms, 1/4W	AA
R203	VRD-ST2CD102J	1 kohm, 1/6W	AA
R204	VRD-ST2CD102J	1 kohm, 1/6W	AA
R205	VRD-MF2EE271J	270 ohms, 1/4W	AA
R206	VRD-MF2EE271J	270 ohms, 1/4W	AA
R207	VRD-MF2EE152J	1.5 kohms, 1/4W	AA
R208	VRD-MF2EE152J	1.5 kohms, 1/4W	AA
R209	VRD-MF2EE181J	180 ohms, 1/4W	AA
R210	VRD-ST2CD181J	180 ohms, 1/6W	AA
R211	VRD-ST2CD682J	6.8 kohms, 1/6W	AA
R212	VRD-MF2EE682J	6.8 kohms, 1/4W	AA
R213	VRD-ST2CD124J	120 kohms, 1/6W	AA
R214	VRD-MF2EE124J	120 kohms, 1/4W	AA
R215	VRD-ST2CD683J	68 kohms, 1/4W	AA
R216	VRD-MF2EE683J	68 kohms, 1/4W	AA
R217	VRD-ST2CD103J	10 kohm, 1/6W	AA
R218	VRD-ST2CD103J	10 kohm, 1/6W	AA
R219	VRD-ST2CD393J	39 kohms, 1/6W	AA
R220	VRD-ST2CD393J	39 kohms, 1/6W	AA
R221	VRD-MF2EE332J	3.3 kohms, 1/4W	AA
R222	VRD-MF2EE332J	3.3 kohms, 1/4W	AA
R225	VRD-ST2CD153J	15 kohms, 1/6W	AA
R226	VRD-ST2CD153J	15 kohms, 1/6W	AA
R227	VRD-MF2EE222J	2.2 kohms, 1/4W	AA
R228	VRD-ST2CD222J	2.2 kohms, 1/6W	AA
R230	VRD-ST2CD105J	1 Mohm, 1/6W	AA
R232	VRD-MF2EE103J	10 kohm, 1/4W	AA
R233	VRD-ST2EE560J	56 ohms, 1/4W	AA
R239	VRD-ST2CD333J	33 kohms, 1/6W	AA
R301	VRD-MF2EE222J	2.2 kohms, 1/4W	AA
R302	VRD-MF2EE563J	56 kohms, 1/4W	AA
R303	VRD-MF2EE102J	1 kohm, 1/4W	AA
R304	VRD-ST2CD102J	1 kohm, 1/6W	AA
R305	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R306	VRD-MF2EE103J	10 kohm, 1/4W	AA
R307	VRD-MF2EE684J	680 kohms, 1/4W	AA
R308	VRD-ST2CD150J	15 ohms, 1/6W	AA
R309	VRD-MF2EE332J	3.3 kohms, 1/4W	AA
R310	VRD-MF2EE104J	100 kohm, 1/4W	AA
R311	VRD-MF2EE103J	10 kohm, 1/4W	AA
R312	VRD-ST2CD102J	1 kohm, 1/6W	AA
R313	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R401	VRD-MF2EE561J	560 ohms, 1/4W	AA
R402	VRD-MF2EE681J	680 ohms, 1/4W	AA
R403	VRD-MF2EE223J	22 kohms, 1/4W	AA
R404	VRD-MF2EE223J	22 kohms, 1/4W	AA
R405	VRD-MF2EE393J	39 kohms, 1/4W	AA
R406	VRD-MF2EE393J	39 kohms, 1/4W	AA
R407	VRD-MF2EE182J	1.8 kohms, 1/4W	AA
R408	VRD-MF2EE182J	1.8 kohms, 1/4W	AA
R409	VRD-MF2EE180J	18 ohms, 1/4W	AA
R501	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R502	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R503	VRD-MF2EE684J	680 kohms, 1/4W	AA
R504	VRD-MF2EE684J	680 kohms, 1/4W	AA
R505	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R506	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R507	VRD-MF2EE221J	220 ohms, 1/4W	AA
R508	VRD-MF2EE221J	220 ohms, 1/4W	AA
R509	VRD-ST2CD103J	10 kohm, 1/6W	AA
R510	VRD-ST2CD103J	10 kohm, 1/6W	AA
R513	VRD-MF2EE272J	2.7 kohms, 1/4W	AA
R514	VRD-MF2EE272J	2.7 kohms, 1/4W	AA
R515	VRD-ST2CD153J	15 kohms, 1/6W	AA
R517	VRD-MF2EE472J	4.7 kohms, 1/4W	AA
R518	VRD-ST2CD472J	4.7 kohms, 1/6W	AA
R519	VRD-MF2EE820J	82 ohms, 1/4W	AA
R520	VRD-MF2EE820J	82 ohms, 1/4W	AA
R521	VRD-MF2EE101J	100 ohm, 1/4W	AA
R522	VRD-MF2EE101J	100 ohm, 1/4W	AA
R523	VRD-ST2CD181J	180 ohms, 1/6W	AA
R525	VRD-MF2EE102J	1 kohm, 1/4W	AA
R526	VRD-MF2EE102J	1 kohm, 1/4W	AA
R601	VRD-ST2EE100J	10 ohm, 1/4W	AA
R602	VRD-MF2EE102J	1 kohm, 1/4W	AA
R603	VRD-MF2EE471J	470 ohms, 1/4W	AA
R651	VRD-MF2EE151J	150 ohms, 1/4W	AA
R652	VRD-MF2EE563J	56 kohms, 1/4W	AA
R653	VRD-MF2EE103J	10 kohm, 1/4W	AA
R654	VRD-MF2EE100J	10 ohm, 1/4W	AA

REF.NO.	PART NO.	DESCRIPTION	CODE
R701	VRD-MF2EE222J	2.2 kohms, 1/4W	AA
R705	VRD-MF2EE563J	56 kohms, 1/4W	AA
R706	VRD-MF2EE103J	10 kohm, 1/4W	AA
R707	VRD-MF2EE101J	100 ohm, 1/4W	AA
R711	VRD-ST2CD103J	10 kohm, 1/6W	AA
R712	VRD-MF2EE682J	6.8 kohms, 1/4W	AA
R713	VRD-ST2CD224J	220 kohms, 1/6W	AA
R714	VRD-ST2CD224J	220 kohms, 1/6W	AA
R715	VRD-ST2CD103J	10 kohm, 1/6W	AA
R716	VRD-MF2EE103J	10 kohm, 1/4W	AA
R717	VRD-ST2CD153J	15 kohms, 1/6W	AA
R718	VRD-ST2CD103J	10 kohm, 1/6W	AA
R719	VRD-ST2CD103J	10 kohm, 1/6W	AA
R720	VRD-ST2CD332J	3.3 kohms, 1/6W	AA
	VRD-MF2EE000C	0 ohm, 1/4W, ±0.25 ohm, Jumper	AA

CIRCUIT PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
BI101/102	QCNW-3390AFZZ	Connector Assembly, 2/2Pin	AD
BI801	QCNW-3391AFZZ	Connector Assembly, 2Pin	AB
CNS501	QCNW-3392AFZZ	Connector Assembly, 3Pin	AE
CNS101/201 CNS701/702	QCNW-3388AFZZ	Connector Assembly, 3/5/9/5Pin	AM
CNP1	QCNCM659FAFZZ	Plug, 6Pin	AC
CNP101	QCNCM603CAFZZ	Plug, 3Pin	AB
CNP201	QCNCM605EAFZZ	Plug, 5Pin	AB
CNP501	QCNCM136CAFZZ	Plug, 3Pin	AB
CNP701	QCNCM590JAFZZ	Plug, 9Pin	AC
CNP702	QCNCM586EAFZZ	Plug, 5Pin	AB
CORE1	RCōRF0053AFZZ	Core	AB
⚠F801	QFS-C122FAFNi	Fuse, T1.25A	AD
J301	QJAKE0124AFZZ	External Microphone Socket	AC
J501	QJAKJ0145AFZZ	Headphones Socket	AF
M1	RMōTV0214AF01	Motor, with Pulley	AU
M2	RMōTV0214AF02	Motor, with Pulley	AU
⚠SO801	QSōCE0595AFZZ	Socket, AC Power Supply	AG
SP1	VSP0090P-14PA	Speaker, Woofer	AN
SP2	VSP0090P-14PA	Speaker, Woofer	AN
SP3	RALMB0064AFZZ	Speaker, Tweeter	AC
SP4	RALMB0064AFZZ	Speaker, Tweeter	AC
SW1	QSW-B0187AFZZ	Switch, Lever Type	AM
SW201	QSW-S0489AFZZ	Switch, Slide Type	AE
SW401	QSW-S0488AFZZ	Switch, Slide Type	AD
SW501	QSW-S0487AFZZ	Switch, Slide Type	AE
SW601	QSW-S0448AFZZ	Switch, Slide Type	AE
SW651	QSW-S0267AFZZ	Switch, Slide Type	AD
SW701	94RMSW-1669	Switch, Leaf Type	AE
SW702	94RMSW-1669	Switch, Leaf Type	AE
SW703	94RMSW-1373NBK	Switch, Leaf Type	AD
TP1	QLUGP0109CEFW	Lug	AA

MECHANICAL PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
1	94R18210160	Main Base Assembly	—
2	94R18210167	Plate, Switch	AC
3	94R182101501	Push Button Actuator Assembly	AD
4	94R18210147A	Lever, Record Button	AC
5	94R18210142C	Lever, Play Button	AC
6	94R18210144	Lever, Rewind Button	AC
7	94R18210143	Lever, Fast-Forward Button	AC
8	94R18210145	Lever, Stop Button	AC
9	94R182101504	Lever, Pause Button	AD
10	94R18210168	Lever, Rewind	AC
11	94R18210151	Lever, Pause	AC
12	94R18210116	Spring, Pause Lever	AB
13	94R18210134	Stopper, Pause	AA
14	94R18210113	Spring, Button Lever	AB
15	94R18210119	Sub Chassis	AD
16	94R18210107	Spring, Button Lever	AB
17	94R18290110	Stopper	AC
18	94R15100202	Plate, Record Spring	AC
19	94R18210122	Spring, Actuator	AB
20	94R18210162	Lever, Auto	AC
21	94R18210121	Spring, Auto Lever	AB
22	94R18210138	Spring, Switch Actuator	AB
24	94R18210123	Spring, Button Lever	AB
25	94R18290304	Plate, Head, Deck 2	AD
26	94R18210310	Plate, Head, Deck 1	AD
27	94R18210302	Head Base, Deck 1	AC
28	94R182903301	Sensing Plate Assembly	AD
29	94R18290302	Head Base	AC
30	94R18210304	Spring, Head Plate	AD
32	94R18210308	Spring, Erase Head	AB
33	94R18211305	Screw, Lever Retaining	AA
34	94R18210307	Spring, Azimuth	AB
35	94R182104301	Pinch Roller	AG
36	94R18210404	Spring, Pinch Roller	AB
39	94R182107302	Roller, Fast-Forward/Rewind	AH
40	94R18210704	Spring, Fast-Forward/Rewind Roller	AB
41	94R18670405	Arm Coller	AA
42	94R18210703	Belt, Fast-Forward/Rewind	AG
44	94R182109301	Flywheel	AK
45	94R182910501A	Main Chassis	—
46	94R182110503	Plate, Take-Up Gear	AD
47	94R18670310	Roller, Take-Up	AB
48	94R18211008	Spring, Take-Up Gear Plate	AB
49	94R18670309	Gear, Fast-Forward	AB
50	94R18211012	Spring, Back Tension	AB
51	94R182110301	Supply Reel Assembly	AF
52	94R182910302	Take-Up Reel Assembly	AF
53	94R18000201	Lever, Record Safety	AC
54	94R18000517	Spring, Back Tension	AB
55	94R18211229	Bracket, Motor	AE
56	94R18201306	Rubber, Motor	AA
57	94R18211202	Coller Screw	AA
59	94R18211221	Main Belt, Deck 1	AG
60	94R18211210	Bracket, Motor, Deck 2	AC
61	94R17200905	Main Belt, Deck 2	AG
62	94R18211306	Lever, Eject Slide	AC
63	94R18211302	Spring, Eject Slide Lever	AB
64	94R18291001	Spring, Cassette Press	AC
66A	RHEDF0096AFZZ	Head, Playback	AM
66B	RHEDH0142AFZZ	Head, Record/Playback	AN
67	RHEDA0128AFZZ	Head, Erase	AG
70	94R90760000	Screw, ϕ2 × 3mm	AA
71	94R91790000	Screw, ϕ2 × 3mm	AA
72	94R91800000	Screw, ϕ2 × 4mm	AA
73	94R96790000	Screw, ϕ2 × 5mm	AA
74	94R98300000	Screw, ϕ2 × 6mm	AA
75	94R90040000	Screw, ϕ2 × 6mm	AA
77	94R98200000	Screw, ϕ2 × 7mm	AA
78	94R99220000	Screw, Azimuth	AA
79	94R98210000	Screw, ϕ2 × 8mm	AA
82	94R94210000	Washer, ϕ1.2 ×ϕ3 × 0.25mm	AA
83	94R98880000	Washer, ϕ1.2 ×ϕ3 × 0.4mm	AA
84	94R98750000	Washer, ϕ1.55 ×ϕ3.8 × 0.5mm	AA
85	94R99370000	Washer, ϕ2.05 ×ϕ4 × 0.4mm	AA
90	94R18211223	Coller Screw	AA
93	94R18211213	Bracket, Switch	AC
95	94R91810000	Screw, ϕ2 × 5mm	AA
96	94R97590000	Screw (For Camera) ϕ1.7 × 3mm	AA
97	94R97650000	Screw (For Camera) ϕ1.7 × 4mm	AA
101	JKNBZ0430AFSA	Button, Eject/Stop	AD
102	JKNBZ0431AFSA	Button, Play	AD
103	JKNBZ0432AFSA	Button, Pause	AD
104	JKNBZ0433AFSA	Button, Rewind	AD
105	JKNBZ0434AFSA	Button, Fast-Forward	AD
106	JKNBZ0435AFSA	Button, Record	AD
107	LANGF0972AFFW	Bracket, Reinforcement	AD
108	LHLDW1075AFZZ	Nylon Band, 60mm	AA
109	LHLDW1111AFZZ	Wire Holder, 31mm	AA
110	MLEVF1795AFFW	Lever, Record Interlocking	AB
111	MLEVF1796AFFW	Lever, Record Interlocking	AC
112	MSPRD0686AFFJ	Spting, Record Interlocking Lever	AA
113	PZETF0197AFZZ	Fiber	AA
114	LX-BZ0547AFFD	Screw, Record Interlocking Lever	AA
115	XHPSD26P04000	Screw, ϕ2.6 × 4mm	AA
116	XHPSD20P04000	Screw, ϕ2 × 4mm	AA

CABINET PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
201	CCAB-1458AF01	Front Cabinet Assembly, (R)	BB
201	CCAB-1458AF03	Front Cabinet Assembly, (W)	BB
201	CCAB-1458AF05	Front Cabinet Assembly, (BK)	BB
201-1	————	Front Cabinet, (BK)	—
201-1	————	Front Cabinet, (R)	—
201-1	————	Front Cabinet, (W)	—
201-2	TLABZ0241AFZZ	Mirror Plate	AA
201-3	PCUSU0304AFZZ	Cushion, Built-in Microphone	AA
201-4	HDALP0622AFSA	Plate, Dial Scale, (R)(BK)	AK
201-4	HDALP0622AFSB	Plate, Dial Scale, (W)	AK
202	CCAB-1459AF01	Rear Cabinet Assembly	AU
202-1	————	Rear Cabinet	—
202-2	HDECB0289AFSA	Plate, Top	AL
202-3	NPLYD0052AFZZ	Pulley	AB
202-4	PFLT-0132AFZZ	Felt	AA
203	CSPRT1029AF11	Dial Cord Assembly	AC
204	GCōVH1199AFSC	Cover, AC Power Supply Socket	AB
205	GCōVH1208AFSC	Cover, Dial, (BK)	AB
205	GCōVH1208AFSA	Cover, Dial, (R)	AB
205	GCōVH1208AFSB	Cover, Dial, (W)	AB
206	GFTAB1165AFSA	Lid, Battery Compartment	AD
207	GFTAC1520AFSC	Cassette Holder, DecK 1, (BK)	AM
207	GFTAC1520AFSA	Cassette Holder, Deck 1, (R)	AM
207	GFTAC1520AFSB	Cassette Holder, Deck 1, (W)	AM
208	GFTAC1521AFSA	Cassette Holder, Deck 2, (R)	AM
208	GFTAC1521AFSB	Cassette Holder, Deck 2, (W)	AM
208	GFTAC1521AFSC	Cassette Holder, Deck 2, (BK)	AM
209	HGRL-1089AFSA	Speaker Ring, Left	AH
210	HGRL-1090AFSA	Speaker Ring, Right	AH
211	HiNDP1402AFSA	Specifications Label, (BK)	AC
211	HiNDP1400AFSA	Specifications Label, (R)	AC
211	HiNDP1401AFSA	Specifications Label, (W)	AC
212	HPNC-0217AFSA	Punching Metal, Left (R/BK)	AE
212	HPNC-0217AFSB	Punching Metal, Left (W)	AE
213	HPNC-0218AFSA	Punching Metal, Right (R/BK)	AE
213	HPNC-0218AFSB	Punching Metal, Right (W)	AE
214	HSSND0361AFSB	Dial Pointer, (W/BK)	AB
214	HSSND0361AFSA	Dial Pointer, (R)	AB
216	JHNDP1064AFSL	Handle, (BK)	AN
216	JHNDP1064AFSJ	Handle, (R)	AN
216	JHNDP1064AFSK	Handle, (W)	AN
217	JKNBK0337AFSB	Knob, Band Selector	AC
218	JKNBK0346AFSA	Knob, Volume, Tone Control	AD
219	JKNBN0571AFSA	Knob, Tuning Control	AE
220	JKNBP0258AFSA	Knob, Slide	AB
221	KCōUB0185AFZZ	Tape Counter	AH
222	LANGF0960AFFW	Bracket, Tuning Shaft	AB
223	LANGK0457AFFW	Bracket, PWB	AD
224	LBōSZ0118AFZZ	Boss	AB
225	LHLDF1348AFZZ	Frame	AE
226	LHLDZ1286AFZZ	Holder, Tape Counter	AB
227	MLiFP0030AFZZ	Damper	AE
228	MSPRC0563AFFJ	Spring, Battery, +	AA
229	MSPRC0564AFFJ	Spring, Battery, −	AB
230	MSPRC0574AFFJ	Spring, Battery, +−	AC
231	MSPRD0673AFFJ	Spring, Cassette Holder	AA
232	NBLTK0343AFZZ	Belt, Tape Counter, Small	AB
233	NBLTK0344AFZZ	Belt, Tape Counter, Large	AB
234	NDRM-0200AFZZ	Drum	AC
235	NPLYB0081AFZZ	Pulley, Belt	AB
236	NSFTP0064AFZZ	Shaft, Tuning Control	AB
237	PRDAR0422AFFW	Heat Sink	AD
238	QANTR0112AFZZ	Rod Antenna	AN
239	QFSHD2051AFZZ	Holder, Fuse	AA
240	RMiCC0096AFZZ	Built-In Mic.	AE
241	LHLDW9003CEZZ	Wire Holder	AA
242	QCNW-3643AFZZ	Lug, with Lead	AA
243	JKNBK0316AFSC	Knob, Fine Tuning	AC
245	QCNW-3393AFZZ	Lug, with Lead	AA
246	LHLDW3074AFZZ	Wire Holder, PWB	AA
247	PFLT-0504AF00	Felt, 11 × 20mm	AA
248	PFLT-0684AF00	Felt, 7 × 7mm	AA
601	LX-BZ0322AFFF	Screw, ϕ2 ×10mm	AA
602	LX-BZ0546AFFD	Screw, Belt Pulley	AA
603	LX-CZ0010AFFD	Screw, ϕ3 × 40mm	AA
604	LX-CZ0017AFFD	Screw, ϕ3 × 25mm	AA
605	LX-CZ0031AFZZ	Screw, ϕ3 × 8mm	AA
607	LX-RZ0006AFZZ	Stop Ring, ϕ5mm	AA
608	XBBSN30P08000	Screw, ϕ3 × 8mm	AA
609	XBPSD26P08J00	Screw, ϕ2.6 × 8mm	AA
610	XCBSD30P06000	Screw, ϕ3 × 6mm	AA
611	XCBSD30P08000	Screw, ϕ3 × 8mm	AA
612	XCBSD30P10000	Screw, ϕ3 × 10mm	AA
613	XCTSD40P10000	Screw, ϕ4 × 10mm	AA
614	XNESD20-16000	Nut, ϕ2 × 1.6mm	AA
615	XHBSD30P06000	Screw, ϕ3 × 6mm	AA
616	LX-WZ3017CEFN	Lock Washer	AA
617	XWSSN30-07000	Washer, ϕ3 × 0.7mm	AA
619	XBBSD20P04000	Screw, ϕ2 × 4mm	AA

ACCESSORIES/PACKING PARTS

REF.NO.	PART NO.	DESCRIPTION	CODE
⚠	QACCL0055AF00	AC Power, Supply Cord	AL
⚠	QACCZ0059AF00	AC Power Supply Cord	AG
⚠	QACCZ0060AF00	AC Power Supply Cord	AK
	SPAKA1470AFZZ	Packing Add., Left	AD
	SPAKA1471AFZZ	Packing Add., Right	AD
	SPAKC3608AFZZ	Packing Case, (BK)	AH
	SPAKC3606AFZZ	Packing Case, (R)	AH
	SPAKC3607AFZZ	Packing Case, (W)	AH
	SPAKX1635AFZZ	Pad	AB
	SPAKP0420AFZZ	Polyethylene Bag, Unit	AA
	SSAKA0035AFZZ	Polyethylene Bag, Accessory	AA
	TiNSZ0844AFZZ	Operation Manual	AK
⚠	QPLGA0253AFZZ	AC Plug Adaptor	AE
	TCAUA0178AFZZ	Caution Label, AC Power Supply Cord	AA
	TGANE1121AFZZ	Warranty Card	AC
	TGANE1135AFZZ	Warranty Card, For Australia	AC
	TLABZ0770AFZZ	Label, Feature	AC
	TLSTS0001ZZRO	Service Staion List, For Australia	AB
	PSHEK0103AFZZ	Sheet, Button	AB
	RTPEK0101AFZZ	Cassette Tape	AK
	UBATU0010AGZZ	Battery	AC

P.W.B ASSEMBLY(Not Replacement Item)

REF.NO.	PART NO.	DESCRIPTION	CODE
PWB-A1～A3	DKEND0527AF11 (Combined Assembly)	Main/Power Supply/Ext. Mic. Circuit	—
PWB-B	DUNTR0211AF24	Tuner Circuit	—

TECHNICAL INFOMATION

Transparent material used in the cassette compartment is changed to the smoke-colored one for improvement of the appearance image.

MODEL	WQ－271Z(R)	WQ－271Z(W)	WQ－271Z(BK)
Serial No.	XXX12288～	XXX11336～	XXX12636～

REF. NO.	REPLACEMENT PART NO.		DESCRIPTION	CODE
	OLD PART NO.	NEW PART NO.		
207	GFTAC1520AFSA	GFTAC1520AFSP	Cassette Holder,Deck 1(R)	AM
207	GFTAC1520AFSB	GFTAC1520AFSQ	Cassette Holder,Deck 1(W)	AM
207	GFTAC1520AFSC	GFTAC1520AFSR	Cassette Holder,Deck 1(BK)	AM
208	GFTAC1521AFSA	GFTAC1521AFSP	Cassette Holder,Deck 2(R)	AM
208	GFTAC1521AFSB	GFTAC1521AFSQ	Cassette Holder,Deck 2(W)	AM
208	GFTAC1521AFSC	GFTAC1521AFSR	Cassette Holder,Deck 2(BK)	AM

To avoid a difference of the color tone, replace the cassette compartments of Deck 1 and Deck 2 at a time.

SHARP

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